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THE HYPODERMIC SYRINGE.

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That there are still many physicians who, while in active practice, never have made use of the hypodermic syringe, is a fact which cannot be questioned. At the same time we must admit that there are good reasons for this apparent neglect in not employing one of our most efficient methods of administering medicine to the sick. There are many physicians who have never seen a subcutaneous injection performed, who have studied at a time when its application was unknown, but who may have read of the many fatal accidents which occasionally followed its employment; and such practitioners necessarily are afraid of employing means with the use of which they are not thoroughly familiar. We are convinced, however, that no physician who is thoroughly acquainted with hypodermic medication will ever fail to make use of the same, if opportunity offers itself, and we will endeavor in the following to impart the information most desirable, having all the time the wants of those practicing physicians in view who, by the force of circumstances, failed to obtain this useful knowledge. To this end we will first speak of the instrument itself, then of the manner in which the remedies to be injected should be dissolved, and of the medicines and the different solutions usually employed this way; afterward we will mention the parts of the body into which the injections should preferably be made; the precautions to be taken and the dangers to be avoided; and lastly, we shall name the diseases in which the hypodermic method is especially useful, and in which it is frequently our only available means of success.

Generally speaking those syringes which command the highest prices are the best. We prefer a metal case, a glass cylinder, and a graduated piston rod. But a physician may buy any hypodermic syringe which fulfills the following conditions. When water is drawn into the syringe or ejected from it, the operator must note that the piston does not give a sudden jerk; because, whenever such is the case, the cylinder has not all over the same width—a serious fault, making the syringe useless. Further, when the needle is attached and the fluid injected under the skin, not a drop of the solution should pass behind the piston-head; if it does, the latter must either be made tightly fitting or another syringe has to be procured. None of the fluid should pass out between the glass cylinder and the metal case. Then the physician must see that the rod is correctly graduated. Some syringes, when indicating, for instance, five minims, contain in reality seven or more; if the operator is not aware of this fact, dangerous results might ensue. It is necessary, therefore, that we should be well acquainted with the exact capacity of the syringe, and know how far this corresponds with the graduation on the rod. Lastly, the needle must be without a leak, very sharp, and at least one-inch in length. Any hypodermic syringe answering the description given, will fulfill its purpose.

Of all remedies, morphia is most frequently used by the hypodermic method. The dose of

this drug, when injected the first time under the skin of an adult, should be gr. $\frac{1}{6}$. The best plan for the physician to adopt is to carry with him a number of powders, each containing morphiæ gr. $\frac{1}{6}$, and to dissolve one of them in about ten minims of lukewarm water immediately before use. Morphia might also be kept in solution, for which we will give in the following a recipe. All other remedies are better kept in solution.

Before enumerating the different solutions generally used by the hypodermic method, we wish to say the following: The dissolving fluid should be distilled water, and hot at the time of preparation. To each ounce one grain of crystallized carbolic acid should be added, and the solution then be filtered through filtering-paper into a bottle, the wide mouth of which can be tightly closed by a glass stopper. Exposure to air must be avoided, and when using such a solution, it should be clear and without sediment. The following solutions are those generally employed in the practice of medicine. To prevent repetition we omit the addition of the carbolic acid, one drop of which should, as mentioned, be added to each ounce of solution:

MORPHIA.

℞. Morphiæ, sulphat., gr. xvj
Aquæ destill., f℥ j. M.
Sig.—For hypod. use, ♏v–gr. $\frac{1}{6}$.

ATROPIA.

℞. Atropiæ sulphat., gr. ss
Aquæ destill., f℥ v. M.
Sig.—Atrop. ♏vj–gr. $\frac{1}{100}$.

STRYCHNIA.

℞. Strychniæ sulphat., gr. j
Aquæ destill., f℥ ss. M.
Sig.—Strychnia ♏v–gr. $\frac{1}{48}$.

QUINIA. *

℞. Quiniæ sulphat., gr. xxj
Solut. acid. tartar. concentr. f℥ j M.
Sig.—♏xx–gr. vij.

PILOCARPIA. *

℞. Pilocarp. muriat., gr. iv
Acid. muriat., ♏j
Aquæ destill., f℥ ss. M.
Sig.—♏x–gr. $\frac{1}{6}$.

Besides the foregoing the following medicinal substances are frequently administered by the hypodermic method. Ergot,† a special fluid extract, is manufactured for this purpose, the dose being about ♏vj; arsenious acid; Fowler's solution, in the dose of ♏iv and more, is the most convenient form for this acid; iodine, Lugoll's solution, in the dose of ♏v and more, is admirably adapted for the hypodermic administration of iodine; solutions of nitrate of silver, corrosive sublimate, and of caustic potash; further, chloroform, chloric ether, brandy, and aqua ammoniæ, are also frequently injected subcutaneously, for purposes later to be mentioned. There are still other drugs, as hyoscyamia, woorara, etc., employed in the same manner, but those enumerated above are so commonly made use of, that they should be kept on hand by every practicing physician.

Whenever a hypodermic injection shall be made the following conditions have to be observed: Being convinced that the instrument is in perfect order (see above), we either draw the exact amount of the solution to be used into the syringe, or, the better plan, we fill the syringe totally with the solution, and by moving the small screw down the piston rod to the number of minims wanted, prevent the possibility of a larger amount than intended escaping. We prefer the latter plan, as we can this way better get rid of all the air in the syringe, a very important matter. This is best done by holding the syringe with the needle upward, and then allowing all air to escape by pushing the piston up, until all the air is out and only the fluid escapes. By all means we must be certain that the syringe contains no air. We then select the locality for injection, and here we prefer the place as near as possible over the part to be acted upon. If there is no special part, but we wish to make a general impression, then the injection should be made in the upper arm, near the deltoid, or into the abdominal walls, or into the integument covering the inner and anterior side of the thigh. At these places the least pain is felt and absorption is more rapid. Next, we must be exceedingly careful not to push the needle into a vein, as in such a case the most alarming symptoms, and even death, may ensue. Having selected the place, a part of the skin is lifted up with two fingers and the needle thrust rapidly into the subcutaneous areolar tissue, and the solution injected. The needle is then withdrawn and a finger placed immediately over the opening in the skin, and held there, while the operator tries, by moderate pressure, to spread the injected fluid through the cellular tissue. If, either in consequence of a rusty needle or of air having been present in the fluid, or from some other cause, signs should later develop themselves denoting the formation of an abscess, we will mostly be able to prevent this, or limit it decidedly, by painting the part

* No carbolic acid.

† This preparation is apt to clog up the hypodermic needle, and the latter, as well as the syringe, must always be thoroughly cleansed with hot water when this fluid extract has been used.

three times daily with tincture of iodine, till all swelling and hardness have disappeared. Should, notwithstanding this precaution, an abscess form, only a very small opening should be made with a sharp-pointed bistoury. Experience has convinced us that this procedure is far better for the patient, and that the abscess heals with greater rapidity than when it is laid open with a long cut. But if the injection is carefully made, and the precautions mentioned are observed, the moderate and soft swelling following a hypodermic injection will generally disappear within forty eight hours.

We come now to an important question: In what diseases should hypodermic injections be administered? As mentioned before, we will not be able to give every indication, but we will take up the different solutions described, and try to illustrate by instances the indications for their employment.

Perhaps at 2 A.M. the bell rings and the physician is called to a patient, whom he finds in agonizing pain. It may be a case of gastralgia, of colic of any kind, or of any other severe pain. The first indication would always be to relieve the suffering of the patient, and the doctor should not leave the case until that end is gained. Nothing will act as rapidly as a hypodermic injection of morphia, repeated if necessary, should the first not have brought decided relief. In the majority of cases the physician will be able to return home within less than half an hour, the patient enjoying a quiet sleep. The further management of the case may be left for the visit the next morning.

In cases of delirium tremens our chief anchor is still opium, especially in cases where the weakened condition of the heart forbids the employment of chloral. The internal administration of opium is mostly for a long time unsuccessful, as the power of absorption by the vessels of the alimentary canal is, in such cases, on account of the affection of the mucous membranes, mostly below the normal. Here the subcutaneous injection of morphia will act like a charm, and will surprise, by its rapid effect, the physician who used to rely always on the internal administration of opium in these cases. A further indication for the employment of morphia by this method is found in all those cases in which we wish to administer this drug but cannot give it internally, on account of the existing nausea and vomiting. Peritonitis is one of these diseases. In fact, whenever we wish a rapid action of morphia, or when, the use of this drug being indicated, certain conditions of the patient prevent us from administering it successfully by the mouth, the hypodermic method should be employed.

The published record of several cases seems to show that in the hypodermic administration of morphia we possess as reliable an antidote in cases of poisoning by belladonna, as atropia, subcutaneously injected, has proven successful in poisoning by opium. Stubborn cases of myalgia, especially of lumbago, will often yield to combined hypodermic injections of morphiæ gr. $\frac{1}{6}$. and atropiæ gr. $\frac{1}{100}$. In cases of failure of the heart's action, especially when the capillaries of the surface of the body seem to be emptied of blood, the administration of atropia by the same method has given the happiest results.

Strychnia is perhaps our most reliable medicine for paralysis, after any inflammatory condition which might have caused the latter has passed away. The most effective way of employing this drug in such cases is by the hypodermic method; the remedy being injected subcutaneously over the parts affected. Especially in local palsies this method is by far the most effective.

While in common cases of malaria we will succeed in effecting a cure by the internal administration of quinine, or by administering it by the bowel, in many cases of the congestive type we will have to employ this remedy hypodermically, either because the time is too short, so that we could not prevent the next, perhaps fatal, paroxysm by the internal use of quinine, or because the irritable condition of the stomach excludes the latter method. Besides, we gain this way the same effect with a much smaller quantity of the drug —one-third of the internal dose only being required—an item which, under certain circumstances, is of no small importance.

There are few modern remedies which have met with such a success as jaborandi or its alkaloid, pilocarpia. Whenever we wish to produce a powerful diaphoresis, stimulate absorption and increase the flow of urine, and when, for reasons which must be apparent to every physician—as unconsciousness, coma, inability to swallow, or irritability of the stomach, conditions frequently met with in morbus Brightii—we cannot employ this remedy by the mouth, the hypodermic injection of pilocarpia is indicated, and has saved many a patient from a premature death.

Ergot has been employed successfully by the hypodermic method, in cases of enlargement of the spleen and of the thyroid gland. It is then injected over the hypertrophied organ. If we aim to produce contractions of the uterus within as short a time as possible, or to stop internal

capillary hemorrhages, the remedy should be used subcutaneously.

Arsenious acid, or the arsenite of potassium, in the form of Fowler's solution, has been successfully employed in the manner mentioned, in cases of chorea and other nervous diseases, especially when the irritability of the stomach prevents the internal administration of this powerful drug. Some cases of leukæmia, lymphadenoma, have been reported as cured by this method.

Lugoll's solution, injected subcutaneously, is known to stimulate absorption, and is employed mainly in cases of hypertrophy of the thyroid gland, of enlargement of the spleen, and to induce absorption in cystic formations.

The following remedies have been employed hypodermically for the purposes indicated: Solutions of nitrate of silver in cases of nævi or deep-seated neuralgic affections, as sciatica; suppuration follows, and the nævus disappears, and the neuralgia is often benefited by this procedure; solutions of corrosive sublimate, to effect a rapid cure in constitutional syphilis; here the injections are preferably made over the glutei muscles; chloroform has been injected subcutaneously in neuralgia; chloric ether, brandy, and aqua ammoniæ in cases of collapse, and a solution of caustic potash to destroy hair-growth, one drop of the solution being injected near each bulb. This is considered the most reliable and never failing procedure to effectually prevent any further growth of hair in that locality. As mentioned above, many other remedies have been used by the hypodermic method, but for these we must refer the reader to works on this subject.

The main points in favor of all hypodermic medication are the following: The rapid action of the remedy, which enters the circulation immediately, without having to undergo chemical alteration in the stomach; the fact that drugs can be introduced into the system when the irritability of the stomach would forbid their administration by the mouth; and lastly, the possibility of getting the full effect of a medicine in cases of inability to swallow or of unconsciousness.

But, in conclusion, we wish to draw the attention of our readers to one great danger in the employment of hypodermic injections of morphia. Most cases of morphia habit find their origin in the reckless employment of such injections by the attending physician. The latter should never discharge his patient, in cases where a frequent use of this remedy by the subcutaneous method was necessary, until he has convinced himself, by gradual withdrawal of the drug, that no habit has been established, and till the patient has not experienced any restlessness for several days, and enjoyed a quiet sleep for several nights, without the use of morphia. A physician who, in such cases, neglects this precaution, is morally, if not criminally, responsible, if the deplorable habit should become established. We may add, that the administration of bromide of sodium, in doses of thirty grains, three or four times daily, will greatly assist in making the gradual withdrawal of morphia in these cases less painful and easier for the patient, and that the fluid extract of Jamaica dogwood, in doses of twenty to forty drops and more, will assist in obtunding sensibility and procuring sleep. Whenever we are forced to continue, in any case, hypodermic injections of morphia for a longer time, we always engage, after the total withdrawal of the remedy, a reliable nurse for two days and two nights, to watch the patient, as the statements of the latter under such circumstances have to be taken *cum grano salis*. Besides, the contraction of the pupil, even in dim light, will generally tell the physician that his patient is still continuing the morphia.

507 *Franklin street.*

LACERATION OF THE FEMALE PERINEUM.

BY H. V. SWERINGEN, M.D.,

Of Fort Wayne, Indiana.

Read before the Indiana State Medical Society, May 11th, 1882.

My object in presenting for your consideration a few cases of lacerated perinei, is to hear, as an interested spectator, the subject discussed with especial reference to the much disputed point, the proper time for operative procedure. This being my purpose, it will not be necessary to enter into its etiology and prophylaxis.

I commenced the preparation of this report a week ago to-day, subject to the interruptions common to the physician. A mere glance at the literature of the subject was taken, and, therefore, Goodell and Thomas were but hastily consulted. But I am here to relate my own experience, and not that of the excellent authorities quoted, however difficult it may be to divest myself of that gregarious spirit which is disposed to follow the track pointed out by a few leaders.

Case 1.—In the spring of 1876 Mrs. H., a healthy, robust lady, residing on Virdlinger Avenue, Fort Wayne, Indiana, æt. 35 years, primipara, was delivered, by forceps, of a healthy child, which delivery resulted in a complete rupture of the perineum, which was immediately

sutured by three silver wires, after which union speedily took place by the first intention.

Case 2.—On the last day of October, 1880, Mrs. D., residing at No. 71 West Wayne street, Fort Wayne, Indiana, a rather delicate lady, æt. about 30 years, primipara, was delivered, by forceps, of a bright, healthy child, which delivery resulted in a partial laceration of the perineum; two black silk sutures were at once introduced and carbolized injections employed twice daily; union was not effected; septicæmia developed, and death occurred on the twelfth day of November.

Case 3.—On the 5th day of October, 1880, Mrs. E., a healthy, well developed lady, aged about 25 years, residing at No. 11 North Cass street, Fort Wayne, Indiana, primipara, was delivered, by forceps, of a healthy babe, resulting in the laceration of the perineum, to a point about midway between the fourchette and the sphincter; no sutures were employed, simply carbolized vaginal injections were resorted to, night and morning, and the patient directed to assume a lateral posture, without, however, fastening the knees together; union took place rapidly, without suppuration.

Case 4.—On the 17th day of February, of the present year, 1882, Mrs. D., a healthy, vigorous lady, aged about 26 years, primipara, residing at No. 14 Wilt street, Fort Wayne, Indiana, was delivered, instrumentally, of a healthy child, with the result of a complete laceration of the perineum; the rupture was so extensive that for several days it was impossible for her to retain her fæces. No sutures were introduced, carbolized vaginal injections were employed night and morning, and the lateral decubitus rigidly enforced, without tying the knees together; union by the first intention was speedy and perfect.

Thomas, in his great work on the Diseases of Women, on page 129, makes use of the following language:—

"Even when the rupture has been complete, it has been asserted that spontaneous cure has taken place, but such reports need confirmation. Pen once affirmed that he had seen a woman thus injured, and who passed her fæces involuntarily, entirely recover. De la Motte declares that thirty years afterward he met and examined Pen's patient, in Normandy, and found that no recovery had occurred."

In view of the foregoing extract, I feel obliged to give in full the address of this case, which is as follows: Mrs. James M. Dickson, No. 14 Wilt street, Fort Wayne, Indiana; the address of the nurse who attended her is Mrs. John H. Waterman, 157 Van Buren street, Fort Wayne Indiana.

Case 5.—On the 27th day of last month, April, 1882, Mrs. M., a lady in ill health, residing on Walnut street, Fort Wayne, Indiana, was delivered, by forceps, of her second child. As a result of this delivery, the perineum was ruptured down to the sphincter; its examination revealed, also, an old, ununited, partial laceration, which occurred during her first accouchement, nearly two years prior, while residing in another town, and while under the care of another physician. She was now directed to lie constantly, on either side, with her knees tied together, and carbolized washes were ordered to be employed night and morning; no sutures were introduced. Up to the date of the present writing, May 6th, 1882—on which date her babe died in a spasm—nature has entirely failed to effect a union of the severed parts. She is now taking iron, quinine, cod-liver oil, etc. No history was obtained from her, save a general complaint, extending over a period of several years, of an indescribable illness. Her appearance is anæmic, leucocythæmic, or that of general debility, with all that that rather indefinite term implies, and she presents a diathesis not wholly unlike that denominated strumous. I believe that in this case, when her general health is sufficiently improved, union of the ruptured parts will take place by merely revivifying their surfaces and enforcing the lateral decubitus, without resorting to sutures; the latter would have been, in my opinion, unsuccessful in this case.

I have now recorded my own personal practical experience in lacerations of the female perineum. As will be observed, it is by no means extensive; but, diminutive as it is, it has not failed to be suggestive of the following propositions:—

1. If natural, unaided parturition, which we must regard as a healthy physiological function, is not unfrequently followed by pathological and necrological results, the immediate closure of a ruptured perineum by sutures tends to favor these results, by reason of the sources of infection their puncta create. The fact that in many instances these results do not follow the operative procedure does not in the least detract from the soundness of the position here taken.

2. An open, unsutured, non-uniting, but cleanly rupture is certainly not so likely to become infectious as a closed, sutured, ununiting and therefore uncleanly laceration, leaving out of the consideration the foci of infection produced by the sutures alone. Upon this point,

Dr. Goodell writes as follows: "The fears of septicæmia entertained by some physicians are purely hypothetical; for, although the suture-tracks form, in one sense, new foci of infection, yet they close up a raw surface whose area is vastly larger than theirs.

But there is a certain proportion of cases in which these raw surfaces, though sutured, do not unite, and in which, therefore, the suture-tracks increase largely the area of exposed absorbing surface, and hence increase, also, the risk of danger. It is in the interest of this certain proportion of cases that I write; for if it can be shown that death occasionally results from septicæmia, due to the immediate operation, and very seldom if ever from the remote, and that nature alone, if let alone, with favorable conditions, would be more frequently successful in effecting a cure, our rule of action is made plain. Parturition, under the most favorable circumstances is attended with great risk, and if we can well postpone an operation which would have the least tendency to increase this risk, it is our duty to do so.

3. If, then, it could be established beyond a reasonable doubt, that, all things being equal, in all cases of ruptured perinei in which art succeeds in effecting an immediate union nature would likewise prove successful, the immediate operation should never be attempted.

I feel deeply the importance of this subject, because I shall never be able to banish from my mind the impression that the case I lost died of septicæmia, directly traceable to the immediate operation.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF LOUIS A. DUHRING, M.D.,

Professor of Dermatology.

Reported by Fred. A. Taylor.

Case 1.—Eczema Rubrum, Infantile.

Our first patient is an infant about six months old, who has marked eczema rubrum of the face, showing also erythematous lesions of the same disease on the forearms and hands. It is much more marked on the face, which is the usual seat of the disease in infants. Here it is characterized by crusted patches, resulting from broken down vesicles and pustules. These patches which you see did not come out as such. The primary lesions were vesicles, papulo-vesicles or pustules; these became scratched, and broken down and dried; then new lesions appeared, which were again scratched down, and drying with the others, have ultimately resulted in these patches. This is the usual course in such cases, and hence, as the patient is not generally brought to us for a month or two after the disease has made its appearance, the original lesions are rarely seen. This case, however, exhibits on the backs of the forearms and hands an eruption of the papulo-vesicles, evidently of recent appearance, which are the typical, original lesions in this form of eczema. The case is typical of what you will frequently meet in practice, as this form of eczema is common in young infants.

The treatment is in some cases easy and in others not. It is hard to predict in any given case what its course will be. In the case before us the general health is good, and no internal treatment is indicated. A not very stimulating local treatment is needed. We will employ an ointment of boracic acid, a drachm to the ounce of vaseline, to be rubbed in three times a day; the parts to be previously washed with a lotion containing three drachms of boracic acid to the pint of water. We will continue this for a week, and if no benefit results, we will substitute an ointment composed of equal parts of tar ointment and vaseline.

Case 2.—Tubercular Syphiloderm of Nose.

The next case is that of a woman, about forty years of age, who has been under treatment two weeks for a tubercular syphiloderm. The lesions occupy both sides of the nose, extending somewhat upon the cheek. They are broken down and are in a state of involution; they are, however, still much swollen, indurated, of a reddish, violaceous hue, clearly outlined against the surrounding healthy tissue. You notice, also, on the nose, two or three characteristic bluish cicatrices. The history of the case does not concern us, aside from the appearance of the secondary symptoms. She has had the skin disease, she says, six or eight months. It has improved markedly under the treatment we have given her. Internally she has had the following:—

R.	Potassii iodidi,	ʒij
	Hydrargyri biniodidi,	gr. iss
	Tinct. cinch. comp.,	fʒiv. M.

Sig.—One teaspoonful, with water, after each meal.

Locally, we used, for the right side of the nose, an ointment composed of equal parts of vaseline and oleate of mercury, of thirty per cent. strength. On the left side we used ammoniated mercury, thirty grains to the ounce of vaseline. As you can see, the ammoniated mercury has proved the most valuable by far in this case. The treatment will be continued.

Case 3.—Vesicular Eczema of the Leg.

This man, about fifty years of age, shows a diseased condition of the lower part of the leg. Two or three months ago he received some injury in this region, which was followed in a few weeks by an eruption of vesicular eczema. The lesions have broken down and crusted, and tend to form patches, as in the case of the child whom you just saw. On further examination we find that the disease has appeared on the other leg and both arms. The symmetry is striking.

The patient is rheumatic, and is somewhat

constipated. His treatment, consequently, will be the administration of a saline aperient every morning before breakfast, so that his bowels will be moved once a day; liquor potassæ, in ten or fifteen minim doses, three times a day, after meals; and locally, the black wash, to be dabbed on three times a day, for ten minutes at a time, and the sediment allowed to dry; this to be followed by an application of oxide of zinc ointment. Under this treatment the disease should begin to disappear in a week or ten days.

Case 4.—Furunculosis of the Buttocks

A boy, about ten or twelve years old, and of delicate health, presents extensive disease of the buttocks, characterized by a number of boils, about a dozen in all, variously disposed over the surface; some running together and forming inflamed areas, in various states of evolution; some just making their appearance, others fully developed, and others passing away. The disease is known as furunculosis; in common language, boils.

Many different methods of treatment are advocated for boils, but there is no general rule that can be applied. The treatment must be adapted to each special case, taking into consideration the general health of the patient, the mode of appearance and the location of the disease, whether they have ever appeared before or not, etc. In this case the boy is anæmic, and gives us a distinct history of malaria; and we will prescribe five drops of the tincture of the chloride of iron, to be taken three times a day, after meals, and five grains of quinia, to be taken in one dose, every night. This, I believe, will speedily effect a cure.

Case 5.—Chronic Eczema Rubrum of the Leg.

The next case is one of chronic eczema rubrum of the leg complicated with ulcers, occurring in a man about sixty years of age. The disease forms a continuous patch surrounding the leg; the lower half of a violaceous hue and crusted, the upper part of a more acute appearance and showing vesiculation. Just above the ankle is an ulcer, the size of a half dollar, and scattered over the leg are three or four smaller ones. These ulcers will tend to enlarge and run together, forming ultimately one of the chronic leg ulcers so often met with.

One of the best modes of treating these ulcers is that which we have employed in this case, namely, the use of the rubber bandage. Under this treatment he has slowly improved. Sometimes the use of the rubber bandage tends to aggravate the eczema, but in many of such cases the bandage may be borne by first covering the leg with a cloth. We will continue the bandage on the lower part of the leg, and on the upper part where the disease is more acute and accompanied with itching, we will apply a powder composed of equal parts of oxide of zinc and starch.

Case 6.—Hyperidrosis of Feet and Hands.

A man about thirty-five years of age, who is troubled with excessive sweating of the feet, comes to us for advice. The soles of his feet, you see, present a whitish, macerated and somewhat excoriated appearance, most marked about the heels, where minute beads of sweat may also be detected. The condition you see here is characteristic of the disorder, which is known technically as hyperidrosis. He has been troubled with it, he says, for six months. The palms of the hands are also affected, but he has attributed that to the nature of his employment, which, however, has nothing to do with it.

The treatment to be employed is entirely a local one. We will use a preparation of salicylic acid, composed as follows:—

R.	Salicylic acid,	4 parts
	Starch,	6 parts
	Silicate of magnesia (or talc),	90 parts.

This silicate of magnesia is what is known in the shops as Venetian talc. The powder has been used extensively abroad, particularly in the Prussian army. If the case does not improve in a week or two of this treatment we will substitute the tincture of belladonna, to be applied twice a day. In many cases this produces a remarkable effect.

Case 7.—Mucous Patch.

The next patient, a young man, about twenty-five years of age, has been under treatment about six months for a papulo-squamous syphiloderm, and mucous patches; the primary lesion having occurred about a year ago. We have not seen him for some time. As is usual in these cases, after the symptoms have disappeared under treatment, the patients regard themselves cured, and cease their visits. In this case the eruption has entirely disappeared, but he returns to us with a mucous patch, the size of a dime, irregular in outline, occupying the inner surface of the right side of the lower lip. It made its appearance three months ago, he says, and is continually increasing in size.

The treatment to be employed for mucous patches is the local application, by means of a camel's hair brush, of the acid nitrate of mercury, in the strength of one part to eight or ten of water; or a solution of nitrate of silver, ten or twenty grains to the ounce. Internally, we will give him the protiodide of mercury, in doses of one-sixth or one-fourth of a grain. The mercurial treatment should be continued for one or two years, and we always earnestly advise this, though we know our advice may not be heeded.

Case 8.—Eczema, with Dermatitis.

This woman, about forty-five years of age, shows a diseased condition of the back of the right forearm and hand, characterized by a continuous, markedly inflamed, somewhat crusted patch. Six weeks ago she was troubled by severe itching in this region, probably due to a beginning eczema. She applied for relief to some druggist, who, though probably entirely ignorant of the nature of her trouble, did not hesitate to prescribe some stimulating preparation, the application of which was immediately followed by this severe dermatitis, which has continued to the present time. The case is but an illustration of what frequently happens from the reprehensible practice of druggists assuming the function of the physician.

We will use a preparation of lead water and

oxide of zinc ointment, to allay the inflammation, and will ask to see the case again in a few days.

Case 9.—Excoriations from Pruritus.

An interesting case is presented here, in a woman, about fifty years of age, who shows strikingly marked excoriations over the entire surface of the back, shoulders, and upper part of arms, together with erythematous streaks and patches, all the result of violent scratching. As there are no lesions that would indicate anything else, her itching is due either to pediculosis, *i. e.*, body lice, or to pruritus. A careful examination of the underclothing is always necessary in such cases, to determine the question, the patient's statements not always being sufficiently reliable. The picture presented is a striking illustration of the excoriations patients will sometimes produce on themselves in cases of skin disease.

Over the shoulder blades in particular you see how the skin has been denuded in patches and streaks, an inch or even two inches in length. The examination for pediculosis will be made, and the case treated according to the result.

To allay the itching we may employ the preparation of carbolic acid frequently prescribed in this clinic, viz:—

℞. Acidi carbolici, ʒ iss
Glycerinæ, fʒ iv
Alcoholis, fʒ j
Aquæ, ad Oj. M.
Sig.—Apply freely thrice daily, as a lotion.
(No pediculi were found.—Rep.).

Editorial Department.

Periscope.

Concealed Uterine Hemorrhage.

Before the Obstetrical Society of London (*British Medical Journal*) Dr. Horne read the notes of a case of concealed hemorrhage occurring in a woman, Mrs. B., aged 34, pregnant with her seventh child, otherwise healthy. Previous labors had been easy and uncomplicated. On November 11th, 1881, she went to the Rotunda Hospital; she was then weak and pale, with a moist skin, and was complaining of a feeling of extreme faintness, and of pain shooting down to the groins. She stated that on the previous day she had been exercising rather unduly. Examination showed the external os uteri to be patulous, the internal being closed. No presentation could be made out. Dr. Horne tried to rupture the membranes, but got no liquor amnii, nor could the fœtus be felt. There was the abdominal tumor, and the woman's history that she was far on in pregnancy; but palpation and the stethoscopic examination gave only negative results. The vagina was, therefore, plugged, and on the second day the fœtus, still-born, was found in the vagina, covered with the unbroken membranes, and the placenta attached. A large clot of blood was subsequently expelled from the uterus, and the woman made a good recovery. Dr. Horne had found records of thirty-seven cases; in twenty-three the mother died; in all, the child was still-born. Out of one hundred and ten cases, compiled by German authors, fifty-six mothers died; while seven children were saved. The cases were to be recognized by the presence of all the symptoms of hemorrhage, without visible bleeding, a tense uterus with pain over it, but at no time true labor pains. The first question that suggested itself was, was the woman pregnant or not, for no fœtus could be felt? The question of treatment was an important one, and one on which some difference of opinion existed. Was it better to treat it like a case of ordinary accidental hemorrhage, or procrastinate, in order to conserve the patient's strength? The latter was the line adopted in the present case, and with the favorable result recorded. Dr. Kidd thought that the great difficulty was the diagnosis. He saw a case of a lady who, when eight or nine months' pregnant, fell down stairs; pain set in, soon followed by collapse, which passed off in a few hours. He found the uterus enlarged and doughy; the os was closed; there was no hemorrhage in the vagina. He introduced a Barnes' bag, dilated the os, and delivered as quickly as possible; but the woman died. The best practice in such cases was to dilate the os and deliver as quickly as possible, unless the woman were actually collapsed and pulseless. Dr. Denham related a case which had occurred in Dr. Johnston's practice. A lady, between eight and nine months' pregnant, was suddenly seized with a fainting fit, and all the symptoms of hemorrhage except external bleeding, not a single drop appearing externally; she died, and the post-mortem examination showed the placenta to be adherent all round its margin, but detached on its flat surface completely, and a large hemorrhage separating it from the uterine wall. He agreed with Dr. Kidd, that dilatation of the os and rapid delivery was the best treatment in such cases, but preferred to use his fingers instead of Barnes' bag. Dr. Atthill said that in the 14,000 cases which had been delivered during his mastership of the Rotunda Hospital, this was the only case of concealed hemorrhage, showing how rare it was. In all the recorded cases in which the membranes were ruptured, the patients died; he did not, therefore, think the practice a good one; and, considering the sudden emptying which occurred under such circumstances, there was every reason to believe that it would tend to produce fresh hemorrhage. He therefore advised that, unless the woman were dying or sinking, the membranes should not be ruptured, or delivery rapidly effected, unless uterine action could be first induced. Dr. Macan said that the rule on the Continent was not to rupture the mem-

branes unless the uterus was acting, for, by doing so, the only thing which restrained the hemorrhage—namely, the intra-uterine tension—was relieved. Pain he regarded as an important diagnostic. Women died from shock which was quite out of proportion to the amount of blood lost. He did not advise rupturing the membranes, but dilated the os by means of Hegar's dilators, as they were more easy of application than Barnes' bag. The utter want of uterine action in such cases made him think there must be something radically wrong with the uterus itself. Dr. Dill had long been impressed with the belief that the collapse was due to the shock of the hemorrhage, and not to the amount. He thought that a diagnosis could generally be made by the (1) history, (2) local pain, and (3) collapse. He advised an expectant line of treatment, sustaining the patient's strength, giving ergot, and encouraging uterine action.

Suicide.

The *Lancet* says: The distressing increase in the number of suicides has been commented upon again and again, but the facts which have been observed by different writers have recently been got together and published in such a complete form by the *Economiste Français* that it may be well to give a concise summary of them. Beginning with France, the writer points out that from 1827, since which year there has been a register of the number of suicides known to have been committed, the annual average has risen from about 1500 to upward of 6000, the number in 1851 having been 3639, or one suicide for every 9833 inhabitants, while in 1879 there were 6496 suicides, or one for every 5681 inhabitants. This increase of 78 per cent. is not peculiar to France, for in Prussia, from 1873 to 1877, the increase was 53 per cent., and in Bavaria 60 per cent. The proportion per million inhabitants rose from 66 in 1860-70 to 81 in 1875 in Belgium; from 74 in 1865 to 144 in 1877 in Austria; from 30 in 1874 to 41 in 1877 in Italy; from 23 in 1872 to 35 in 1876 in Russia; from 233 in 1874 to 257 in 1876 in Denmark; and in England, from 67.2 in 1866 to 69.2 in 1877.

It is a well-known fact that the great majority of suicides are committed by men, the average proportion of the different countries of Europe being 80 per cent. of men to 20 per cent. of women. Signor Morselli, in his well-known work entitled, "Il Suicidio," recently reviewed in our columns, holds that more women, proportionately, commit suicide in the country than in towns, and the figures which he is able to quote confirm this argument. In England the heaviest contingent of suicides is among men of from forty-five to fifty-five years of age. Among women suicide is most frequent in Sweden, Denmark, Bavaria, Prussia, Saxony, and Austria, between the ages of twenty and thirty, and in England between the ages of thirty five and forty-five.

It has been established by M. Bertillon that widowers and bachelors commit suicide more frequently than married men, the general proportion being about 54, as compared with 46 per cent.

There is a very great difference in the mode of committing suicide, as may be seen from the following table, showing the proportion per 1000 in five of the principal countries of Europe:—

	England.	*Prussia.*	*Italy.*	*Belgium.*	*Switzerland*
Hanging	368	608	167	545	430
Drowning	208	182	308	228	267
Firearms	46	109	244	118	70
Stabbing	206	54	55	39	67
Poisoning	94	30	61	23	33
Falling from height	94	9	113	15	11
Suffocating	94	8	22	4	13

In France 45 per cent. of the suicides are by hanging, 29 per cent. by drowning, 11 per cent. by shooting, 7 per cent. by suffocation, and 3 per cent. by jumping from high places; whereas forty years ago the most frequent mode of suicide in France was by drowning. As might be expected, suicide by drowning is more frequent in summer than it is in winter, the prevalent modes in the winter months being hanging and poison.

The most important chapter in this essay is that which relates to the causes of suicide, and the *Economiste Français* states that out of 30,128 cases of suicide registered in France during the years 1875 to 1879, 9175 were due to cerebral derangement, 5814 to physical suffering and various misfortunes, 4937 to love, jealousy, and dissipated conduct, 4035 to family bickerings, and 2867 to poverty. In the statistics of Prussia, from 1869 to 1877, the first place is held by mental disease, domestic afflictions and misconduct, physical suffering, and jealousy coming last. Mental derangement comes first in the causes of suicide in Belgium, Italy, and several other countries quoted by Signor Morselli, who asserts that altogether the suicides due to this cause are a third of the whole. It is almost a truism to say that the number of suicides has always increased or decreased according to the state of the country. Thus, in Vienna, the number of suicides, which had been 91, 141, and 153 in the three years preceding the financial crash of 1873, rose at once to 216, while after the dearth of 1854 the number of suicides rose from 3415, 1942, 991, and 150 in France, Prussia, Austria, and Belgium, to 3810, 2351, 1066, and 189.

While the number of suicides is greater in towns than in countries, it is also much greater among educated than among illiterate people. This is a rule to which there is no exception, Germany having a much larger proportion of suicides than Spain or Russia, and Belgium than Ireland. In most countries suicide is much more prevalent among Protestants than it is among Catholics, and especially among Jews. Herr Wagner, whose researches in regard to the causes of suicide are very well known, states that in Prussia, out of a million inhabitants there are 159.9 suicides of Protestants, as against 49.6 of Catholics and 46.4 of Jews; in Bavaria, 135.4 suicides of Protestants, as against 49.0 of Catholics, and 45.9 of Jews; and in Austria, 79.5 suicides of Protestants, as against 51.3 of Catholics and 20.7 of Jews. Speaking generally, it may be said that in countries which are purely Catholic, suicide is at the rate of 58 to the million, in countries where the religion is partly Catholic and partly Protestant, 96 to the million, and in solely Protestant countries, 190 to the

million. Such are the figures given by the *Economiste Français* in the course of a very interesting article; but it is somewhat startling to read, by way of conclusion, that the best remedy for suicide is to be found in a good sound education, the writer having, as mentioned above, just quoted figures to show that it is most frequent in those very countries where education is the most advanced.

Hyoscyamine.

Dr. Kenneth W. Millican thus writes, in the *Lancet*:—

Hyoscyamine is a drug which apparently possesses very valuable therapeutic properties, and like many other of the alkaloids requires only to be known to be appreciated. The first case in which I employed it was one of hepatic colic. Feeling convinced, from its combined anodyne and anti-spasmodic properties, that good results might be anticipated from its administration, I prescribed it in doses of $\frac{1}{120}$ gr. every half hour until relief was obtained. The patient, a woman who had several times previously passed gall-stones, was greatly relieved after three doses, and the administration was kept up at intervals of an hour until after the spasm ceased. I have several times used it in abdominal colic, in the same doses, frequently repeated, and on all occasions with the best results; and it has also proved the most effectual remedy in relieving the painful distress of spasmodic asthma. Indeed, in this latter complaint, my patient, a long-standing martyr to the affection, admits that it has given him more ease than any other drug he has taken, and has completely displaced chlorodyne in his estimation. But, perhaps, the most valuable case of its successful administration is the most recent of all. The patient was a young woman from service who, when I first saw her, was in the most intense abdominal pain. There was considerable diffused peritonitis, and for some time the cause was uncertain. I was at first disposed to suspect, from the history, a pyæmic origin, but ultimately concluded that the peritonitis resulted from collections of fæces at the hepatic and splenic flexures of the colon. Morphia was administered, both subcutaneously and by the mouth, and attempts were made to clear the bowels by bland enemata, but all to no avail. Having pushed the morphia as far as I dared, I was obliged to withhold its further administration, for though the pupil gave indications of its action, the pain did not seem to be in the least abated by it. After some time I determined to employ hyoscyamine, which I did, in doses of one-fortieth of a grain, every two hours. At first it seemed slightly to increase the pain, but shortly after its physiological action upon the fauces and pupil became manifest the pain began gradually to subside, and a fairly fluid evacuation of the bowels ensued. From that time the patient began to mend, and is now progressing fairly well. When I first used hyoscyamine I employed the granules manufactured by M. Chanteaud, the eminent French pharmacien. But recently I have used a solution of the alkaloid (Merck's crystallized), in rectified spirits of wine, of the strength of one grain in two drachms. One minim of this solution thus contains $\frac{1}{120}$ grain of the drug, which can either be administered in a mixture with a little dill water, or may be used to form lozenges with sugar of milk.

Persistent Hymen.

So much has been made of the presence of the hymen as a proof of virginity, that the following case, coming from so high an authority as Dr. Thomas, who presented it to the New York Obstetrical Society (New York *Medical Journal and Obstetrical Review*, May, 1882) will possess much interest in a medico-legal aspect:—

A German lady, belonging to the upper walks of life, had been married eight years, but had never become pregnant. Being dissatisfied, she consulted him with regard to the cause of her sterility. In reply to his questions she said her menses were perfectly normal, she had very little leucorrhœa, and the only symptom of which she complained was a good deal of backache. A vaginal examination was proposed, and on attempting to introduce his finger Dr. Thomas found it impossible to do so, on account of the presence of an unruptured hymen. The hymen was perforated by an opening only barely large enough to admit a common sized lead pencil. The woman, however, again affirmed that she had been married eight years, and said that her husband had had intercourse with her regularly, at least once or twice a week, and that there had been nothing abnormal about it whatever. When he explained to her the condition of things she laughed and said it was impossible; she could not still be a virgin. Her husband, whom she was requested to send to the speaker's office the next morning, came, and he also laughed when informed that his wife was a virgin, and told Dr. Thomas, in a pleasant sort of way, that he was a *farceur*. He was about thirty-eight years old, of good figure, and said that his sexual vigor was perfect; before his marriage he had been something of a man of the world, and knew very well what it was to have intercourse with women; he had been married eight years, had had intercourse with his wife regularly, and in a perfectly normal way. Having now placed himself in such relations to the man that he would have to prove his position, Dr. Thomas requested him to bring his wife to his office the next day, which he did. Placing the woman in position, Dr. Thomas separated the labia, and showed to her husband the exact state of things. He was amazed, and could only reiterate that intercourse had been regular during the eight years of their married life. It was proposed to remove the hymen and put in a glass plug; but the husband desired him to wait a week, for he thought that in the meantime he could make all right. At the end of the week, however, the man returned, and said he now recognized that he had never had intercourse with his wife in the proper way, but how he had been deceived during these eight years he could not possibly understand. The woman was afterwards etherized, the hymen was removed, and a glass plug was introduced. Her husband said that now everything was changed, greatly for the better.

Retractile Albumen.

The *Lancet* says, editorially: A distinction was drawn first by Bouchard, in 1880, between retractile and non-retractile albumen, and he sought to establish the clinical significance of the two varieties. When albuminous urine is coagulated by heat, the precipitate sometimes has a homogeneous appearance, but sometimes is in the form of definite flocculi. The latter he regarded as the normal albumen of the blood, which could only pass out by the kidneys if there was an actual alteration of the renal filter. On the other hand, the non-retractile albumen is altogether abnormal, dialysable, and capable of passing out through the kidneys, although these are in a normal state. Thus the character of retractility was supposed to be an indication of actual disease of the urinary organs. This supposed distinction has attracted much attention on the Continent. Unfortunately Lépine and Cazeneuve have shown that the difference in the form assumed by the coagulated albumen depends much more on the liquid in which the coagulation is effected than on the albumen. The addition of an alkali prevents retractility, and conversely, an apparently homogeneous precipitate retracts into flocculi if a little acetic acid is added, no doubt, in consequence of the decomposition of alkaline albuminates. These conclusions have been confirmed by a series of observations made during the past winter by Dr. Rodet, of Lyons. In some urine from a patient with typhoid fever, which contained a small quantity of albumen, on two successive testings, he obtained in one flocculent and in the other non-retractile albumen. The reagent employed was that preferred by Bouchard, Tanret's solution, which consists of iodide of mercury dissolved in iodide of potassium and acidulated with acetic acid. The effect was found to be due to the amount of the reagent employed; a small quantity caused manifest retractility, but with a larger quantity this character was only observed in a slight degree after the urine had been boiled for one or two minutes. In a specimen of highly albuminous urine from a case of acute nephritis a flocculent precipitate was obtained when Tanret's solution was added, in whatever quantity; but if the urine was dropped into the heated reagent, the precipitate was non-retractile. On diluting the urine the retractility of the albumen was found to progressively diminish. When slightly diluted a few drops of the reagent yielded large flocculi, but they were much smaller with a larger quantity of the reagent. An extensive dilution abolished all retractility, whatever amount of the reagent was employed. No doubt it was the small quantity of albumen which occasioned the absence of retractility in the febrile cases observed by Bouchard, and gave him the erroneous idea that the character indicated a change in the blood and not in the kidney. It is clear that the differences in the character of a precipitate of albumen depend much more on the liquid in which it is formed than on the composition or character of the albumen itself. Indeed, it is very doubtful whether there is any physical property in the precipitate which can properly be described by the word retractility.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the announcement of the Dental Department of the University of Maryland, for the session of 1882–83.

——"Our Thirtieth Year;" annual address before the Kentucky State Medical Society; delivered by J. W. Holland, M.D. A reprint from the Louisville *Medical News*.

——"The Special Therapeutic Value of Hyoscyamine in Psychiatry." By C. H. Hughes, M.D., of St. Louis. Reprint from the *Alienist and Neurologist*, April, 1882.

——"Acute Dementia Occurring in an Old Man. Recovery after two and one-half months of treatment." By C. H. Hughes, M.D., of St. Louis. A reprint from the *Alienist and Neurologist*, April 1882.

——We have received the thirty-third annual announcement of the Woman's Medical College of Pennsylvania. The college has a large list of matriculants, and seems to be in a very flourishing condition.

——"The Opium Habit, its Successful Treatment by the Avena Sativa;" a paper read by E. H. M. Sell, A.M., M.D., before the New York State Medical Society, February 9th, 1882, and reprinted from the *Medical Gazette*.

——The Essentials of a Law to Regulate the Practice of Medicine in Indiana. A paper full of wise suggestions, read by Thad M. Stevens, M.D., before the Mitchell (Ind.) District Medical Society, in New Albany, December 28th, 1881.

——We have received the Catalogue of the University of Pennsylvania for 1881-2. Containing, as it does, one hundred and eleven pages, we note a striking difference between this substantial volume of '82 and the comparatively insignificant catalogue of '72.

——The "Home Treatment of the Insane," by Samuel Ayres, M.D., of Pittsburgh, Pa., comes to us as a reprint from the Pittsburgh *Medical Journal*. This is an interesting and instructive pamphlet, the perusal of which will amply repay the time it consumes.

——The History of Three Cases of Hip Disease in the Third Stage. By A. B. Judson, M.D., Orthopedic Surgeon to the Out-patient Department of the New York Hospital. Reprint from Illustrated Medicine and Surgery. This is a valuable and very interesting paper, well illustrated.

——Sanitary Survey of Indianapolis, Topography and Surface Geology, Water Supply, Disposal of Excreta, Cellar and Yard Filth, etc. This comes as a reprint from the *Transactions* of the Indiana State Medical Society, 1880, and is a pamphlet possessing peculiar interest to all who have any love for hygiene.

——We have received the report of the sixth annual meeting of the American Medical College Association, held at Cincinnati, May 16th, 1882. The tone of the meeting, and the spirit of the members present, indicated that the Association has entered upon a more hopeful future. Dr. W. W. Seeley, of Cincinnati, is President; and Dr. Leartus Connor, of Detroit, Secretary.

——"Rupture of the Eyeball in its Posterior Hemisphere, from a Blow in the Face." By Julian J. Chisolm, M.D., of Baltimore. "Two Cases of Malignant Tumor of the Sphenoidal Cavities, Implicating Vision." By Julian J. Chisolm, M.D., of Baltimore. These two papers, reprints from the Archives of Ophthalmology, have been received, with the author's compliments.

——"Operation for Radical Cure of Chronic Hernia." By Edward Von Donhoff, A.M., M.D., Louisville, Ky. This little pamphlet describes the author's operation, which in substance is as follows:—

First. The ordinary incision.

Second. The opening of the sac and reposition of the gut.

Third. Cutting away the sac within an inch from the ring, and when not too large (as in some scrotal hernias), dissecting out the distal portions.

Fourth. Closure of the mouth of the sac-neck, by means of strong, double sutures, entered through the skin three-quarters of an inch from the cut edge, thence passed through the sac-wall (both sides), a half-inch from its extremity, the needle making its exit through the opposite skin-flap. As many sutures will be used as are required to securely close the lumen of the neck, and will be quite firmly tied. (The remainder of the incision to be closed as ordinarily.)

Finally. The application of a firm, flat compress, moistened with water, and confined by a spica, will complete the operation.

It is intended, by the means advised, *to secure a broad, firm union between the cut end of the sac and the immediately overlying skin, and a union of the approximate sides of the lumen of the neck.* This accomplished, I think all future trouble from the hernia (?) will have been successfully warded off. If the distal portion of the sac be not removed at the time of the operation, it may be left for after consideration.

BOOK NOTICES.

The Physician Himself and What He Should Add to the Strictly Scientific. By D. W. Cathell, M.D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore. pp. 194. Baltimore: Cushings & Bailey. 1882.

This book has been prepared with the view of telling the young physician how to procure practice. While we do not believe in and cannot sanction physicians who advertise, no matter howsoever discreetly they may cover up their advertising tracks, yet since this volume starts out with the fundamental principle that it is necessary for the physician who desires to be successful to have a thorough knowledge of his profession; and since the advice that it contains counsels nothing that would be unbecoming a gentleman and a physician, therefore, can we recommend it to those young men who, though thoroughly competent, yet are commencing to despair of ever procuring a practice.

The Experimental Method in Medical Science. Second Course of the Cartwright Lectures of the Alumni Association, College of Physicians and Surgeons, New York. By John C. Dalton, M.D. pp. 108. New York: G. P. Putnam's Sons. 1882.

A more readable and interesting little volume one will rarely have the good fortune to hear of. It contains three lectures: Lecture I, "Galvani and Galvanism in the Study of the Nervous System." Lecture II, "Buffon and Bonnet in the Eighteenth Century." Lecture III, "Nervous Degenerations, and the Theory of Sir Charles Bell." They are all extremely interesting, but particularly so is the one which treats of the theories of Buffon and Bonnet. The leisure time of the busy practitioner could not possibly be put to better use than by the perusal of just such works as this.

Materia Medica and Therapeutics; Inorganic Substances. By Charles D. F. Phillips, M.D., Member of the Royal College of Physicians, etc. Edited and Adapted to the United States Pharmacopœia, by Laurence Johnson, A.M., M.D. Lecturer on Medical Botany, Medical Department, University of the City of New York. Vol. II. pp. 340. New York: William Wood & Co., 1882.

This volume constitutes the May number of Wood's Library of Standard Medical Authors. Vol. I has been already noticed.

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HOTBEDS OF DISEASE.

In this age of sanitary progress it behooves us to, and generally we do, look carefully for any causes of disease that may exist around us, and endeavor to remove them. But with the same experience as is met in other fields, it very often happens that while we recognize and make much of slight and trivial matters, we allow to continue unnoticed and unremedied some of the most serious and most fatal disease producing agencies. We make a great outcry against dirty streets, and rightly so; we complain of impure water, and justly; we object to the proximity of manufacturing establishments in which dead organic matter is used, and rightly. These are all potent causes of disease, and we must object to them and have the trouble remedied. But there is another terrible source of ill health, working insidiously (so far as the majority who do not see the evil are concerned), but surely all the time, poisoning the systems and sapping the health of those who fondly and delusively imagine that they are surrounded by all the conditions necessary for healthy and lengthy life.

In every large city that has attained any age will be found a section known generically as the "*slums*," in which are huddled together the vilest, foulest, most degraded and diseased members of the community. Very few of the better class of inhabitants ever see these sections, since they have no business in these neighborhoods. The inhabitants of the *slums*, men, women and children, are so disfigured, disgraced and deformed by the wretched, diseased lives they live, that, in truth, they can scarcely be called human beings. With but an exceedingly rare exception they are all drunkards: their whole lives are passed in a state of intoxication, and this condition is produced by the use of the most vitiated and poisonous liquor. Their food is the poorest and scantiest imaginable, nearly all of it procured by begging or theft. Morality is one of the "lost arts" among them, hence the most loathsome diseases are the rule. Indeed, the venereal wards of the pauper hospitals are filled with the most disgusting and repulsive patients from the slums. Water is not, by them, considered of any use in the world; their filth of body and clothes is something marvelous; you would wonder how any human being could possibly get so dirty. As a natural consequence of all this foulness the houses are absolutely saturated with disease germs, and I verily believe that PASTEUR could almost find bacilli of disease in the bricks of the sidewalks and the cobbles of the streets. The whole section, houses, streets, women, men, children, black and white, for they all live huddled together indiscriminately, the white woman with a black husband and vice versa, dogs, cats, atmosphere, everything and everybody are rotten, are reeking with disease.

In this section we have our *hotbed* of disease. From this nursery, under these favorable circumstances, are generated the elements of disease that are wafted by the winds throughout the city, to poison and disease the millionaire in his palace, who probably is ignorant that any such place exists. It is only necessary for one to walk through any one of these sections to believe firmly this statement. But the remedy!

Simple enough. Almost constantly some rich man is dying and leaving an enormous fortune to erect or endow some institution of learning. Education is one of our greatest blessings, and deserves much encouragement, but the prevention of disease and preservation of health is a more important consideration. Now, then, the following plan ought to be carried out by the city government, but if such is impossible of achievement, then should it be suggested to some wealthy philanthropist. The properties in this section should be bought and *demolished*. This would force the worthless and dangerous population away from their filth and squalor into a location much cleaner and purer, when, by judicious use of moral suasion, their repulsive, brutish natures might be elevated some little. Surroundings have much influence on the nature and mode of life of an individual, and it is to be greatly feared that no amount of persuasion can ever have any permanently good effect on a class of persons surrounded, as these wretches are, by disease, filth, gloom and misery. It is true, as has been said, that to many this state of affairs has assumed the relation of a second nature, and that they prefer such a life and surroundings. To a certain extent, this is true; they know no better life, and are seemingly content with what they have. But their very lives, their actions, all evince a sense of despair altogether incompatible with true contentment.

By resorting to some such measures as suggested a double good would be accomplished. These poor, miserable beings might be elevated and improved, while the general health of the city would undoubtedly be benefited.

THE ATROPHIC KIDNEY.

(*Nephritis atrophicans*).

A short time ago Prof. Biermer gave an interesting description of the atrophic kidney, at a meeting of the physicians in Breslau. We take the following from a report of the *Deutsche Medicinal Zeitung*.

Biermer describes the genuine atrophy of the kidneys as a special disease, distinct from *morbus Brightii*. The course of the malady is as follows: There does not exist a special etiology of the genuine atrophic kidney, but frequently exposure to cold, and especially wet feet, are mentioned as cause. The disease runs, from the beginning, an insidious and chronic course. In the first stage we generally find moderate albuminuria, polyuria and slowly progressing deterioration of the general nutrition of the body. Later two more stages may be distinguished: the second stage, during which the changes taking place in the heart and in the pulse become plainly apparent, but where the hypertrophy of the heart compensates for the disturbance in the kidneys; and the third stage, in which this compensation ceases and uræmic symptoms, besides an extreme emaciation bordering almost on marasmus, develop themselves. The malady may continue several years ere death sets in. The pressure of albumen in the urine is a *sine qua non* to establish the diagnosis; while generally the urine of the atrophic kidney is excreted in large quantities, of low specific gravity, comparatively poor in urea and other solid constituents, mostly free of sediment, and containing a changeable, though mostly small amount of albumen, and very little epithelium, and few casts. The polyuria is generally not connected with polydipsia. The hypertrophy of the heart is usually confined to the left ventricle and presents the concentric form, without dilatation. The pulse is tense; its frequency varying greatly. Palpitation is a rare symptom. Of great diagnostic value are disturbances of vision and positive signs on the retina. Disturbances of respiration are, perhaps, never absent during the course of this complaint. Brain symptoms might not develop themselves till the uræmic stage is reached, but even then they may be wanting till death takes place, which mostly happens under stupor or coma. Want of appetite and dyspepsia may be present or absent. Vomiting has its origin mostly in uræmia, especially when a frequent symptom. General disturbance of nutrition is never wanting. One might say that blood and fat dwindle away together with the kidney. This is one of the distinguishing marks by which

nephritis atrophicans is immediately recognized from harmless, functional albuminuria. A person whose urine contains albumen for a long time, and who does not become emaciated, but rather stout and corpulent, does surely not suffer from an atrophic kidney. The presence of dropsy proves that the case is not one of genuine atrophic kidney, but either one of secondary atrophy or that complications exist. An actually effective treatment of the disease is not known. Any diminution in the excretion of the urine has to be guarded against; astringents, therefore, as lead, silver, ergot or tannic acid, are to be avoided. To increase the quantity of the urine, scilla, digitalis, mineral waters and other mild diuretics as well as tonics are indicated. In the uræmic stage only the narcotics seem to be of any value.

Notes and Comments.

Glycerinum Boracis, for Chancres.

In the *Lancet*, Dr. George Thin relates some very interesting and valuable results derived from the use of the glycerinum boracis in the treatment of chancres. In the first case he describes, a man infects his wife, and for some time no treatment is resorted to. The sore continues to enlarge, and is finally cauterized several times, but without avail, and when Dr. Thin first saw the case, he found a sore, the size of a dime, on the side of the vagina, covered, except at the edges, with a black, sloughy-looking mass. The sore was kept constantly bathed in glycerinum boracis; the inflammatory action subsided, the surface became clean, and the ulcer healed without a bad symptom. While this treatment was going on, a little vesicle appeared on the fourchette, which burst and left a small chancre, which did not spread laterally, but eat down into the tissue for at least a quarter of an inch. The channel was plugged with cotton wadding soaked in glycerinum boracis, and it immediately commenced to heal from the bottom and was soon well.

In the second case there were four chancres on the glans penis, and phimosis supervened. Zinc ointment and black wash were applied, but the inflammation increased. Painting with tincture of iron improved them a little. Subsequently caustic was applied, which greatly increased the inflammation. Dr. Thin saw him two months after the chancres were first contracted, when he had phimosis, with considerable pain and swelling, and it was impossible to retract the foreskin sufficiently to see all the sores. One was seen to be covered with a dirty gray, membranous-looking substance. He was directed to insert, with a blunt probe, pieces of lint soaked in glycerinum boracis, so as to keep the glans and inner surface of the prepuce completely bathed in the solution. Five days afterwards the foreskin could be retracted completely, and all the sores looked healthy, and within ten days they were well.

The third case was very similar. He used this remedy, on the ground that, if the poison keeping up the inflammation was of a parasitic nature, it might be destroyed by the antiseptic properties of borax. His results were so satisfactory, that he proposes in the future to give it a trial in hospital gangrene.

Hemorrhage and Gangrene from a Carious Tooth.

In the St. Louis *Medical and Surgical Journal*, Dr. William A. Byrd reports the following case: He was called to see a boy between seven and eight years of age who was suffering from gangrene of the left side of the face and neck, accompanied with severe hemorrhage. The child was very anæmic, with the left side of the face swollen, with an opening that would admit the point of a finger, opposite the sub-maxillary gland, another in the meatus auditorius, and another in the mouth opposite to the outside of the first molar tooth; from all these openings was flowing a dark, very offensive fluid, mixed with arterial blood, and also, shreds of gangrenous connective tissue protruded from them. For some weeks the child had suffered from an offensive discharge from the left ear; and about two weeks before I saw him the first left molar tooth commenced aching and the jaw to swell. Subsequently a black spot appeared opposite the tooth, and at this spot the skin gave way, giving vent to a dark, very offensive discharge. The swelling from the ear and the tooth coalesced and the abscess broke into the ear and mouth, causing a profuse discharge from each. In a day or two blood was freely discharged from all three openings. The patient was etherized, and it was discovered that the bleeding came from so many points that it would be impracticable to secure all of them without too great a loss of blood and shock to the patient. It was, therefore, decided to ligate the common carotid, which was done with catgut. Through the incision a great quantity of gangrenous matter was removed as high

as above the zygoma and down nearly to the clavicle. The cavity was carefully washed out with a solution of boracic acid and packed with oakum soaked in eucalyptol and vaseline. He rallied well and seemed brighter, but sank again, and died on the second day. Dr. Byrd thinks that the carious tooth was the origin of the trouble, and that if it had been attended to in time the result would most likely have been different.

Gall Stones in an Infant.

Dr. A. Dunbar Walker contributes the following interesting case to the *British Medical Journal*. He saw a male child, three months old, who had been brought up entirely at the breast, and had always been healthy, excepting a slight attack of jaundice, a few days after birth. In the evening it commenced to cry, and continued to do so almost uninterruptedly for six hours, when a sedative mixture afforded a little restless sleep. The next morning a dose of castor oil was given, which soon caused an evacuation. The passage was healthy in appearance, but upon close inspection, three small ovoid bodies, dark green in color, and as hard as wax, were found. The larger one weighed two grains, the other two were much smaller. These substances seemed to consist of cholesterine; minute particles of the coloring matter of the bile could be detected here and there. This occurrence might account for the crying in many cases, and it would suggest the advisability of looking for these gall stones in the case of fretful children.

Corpus Luteum.

Before a recent meeting of the Obstetrical Society of London (*British Medical Journal*), a paper on the above subject was read. Two cases were described. The first was that of a prostitute, aged twenty-one, who died from prussic acid poisoning. In her ovary a fully ripe corpus luteum was found, although she was neither pregnant nor menstruating. The difference between the corpus luteum of pregnancy and that of menstruation was usually ascribed to the increased amount of nourishment received by the follicle in the pregnant state. In this case, he thought that prostitution was probably the cause of the increased nutrition and development of the follicle. The second case was that of a woman, aged forty-one, who died from gangrene of a uterine fibro-myoma. The ovary contained a true corpus luteum, and in other respects resembled the ovary of a pregnant woman. In this case, he thought the increased determination of blood to the part, in consequence of the fibroid, was the explanation of the size of the corpus luteum. The President said that it was important to have the view confirmed that a corpus luteum, having all the characters of that met with in pregnancy, occurred in women who were neither pregnant nor menstruating. He had seen such a corpus luteum in an aged woman, who was believed to be salacious, and he had dissected cases of pregnancy with complete absence of corpus luteum.

Water of the Sacred Springs at Mecca.

The *Journal d'Hygiene* gives the following extract from a letter of Dr. Frankland, regarding the water of the springs at Mecca, regarded as sacred by the Mohammedans:—

"This particular sacred spring is situated at Mecca, and the water is sent in large quantities to the various Mohammedan nations; certain princes have, indeed, a special envoy to send them, each year, a number of bottles of water from the spring. Dr. Frankland says he had the curiosity to make a complete analysis of the water, and found it to be a veritable sewer water, seven times more concentrated than that of the London sewers, for it contains not less than 579 grains of solid matter per gallon.

There is not, probably, a more active means of propagation of epidemics through the Eastern nations.

Removal of Foreign Bodies from the Ear.

In the Detroit *Lancet*, Dr. A. F. Kinne, after pointing out the defects in all the existing instruments and methods for the removal of foreign bodies from the ear, describes a simple instrument, devised by himself, for this purpose, which has answered admirably. It really consists of a minute, sharp-pointed, tenaculum-shaped hook, on the reverse end of which there is a small, blunt hook, for the removal of foreign bodies from the nose. In order to remove a foreign body that has been pushed through the tympanum into the deeper recesses of the ear, it may, in some cases, become necessary to detach the auricle before an instrument can be brought to bear upon it. As a justification for this operation, he relates the following case:—

About twenty-five years ago, I was called to a well grown boy, whose ear had been torn off, close to his head, by a wagon wheel. The wound was ragged and dirty, and the bystanders

thought the ear "no good;" but the skin in front of it was not torn through, and I decided to attempt its restoration, and succeeded. I pinned it on with cambric needles, annealed and curved. And, mindful of the danger that the ear might slough, when I passed my ligature around the ends of these, I sought to bring the torn edges into close apposition, without drawing it tightly enough to interrupt the local circulation.

Of course, very complete access to the middle ear is gained by detachment of the auricle. And, as to the feasibility of the operation, two questions, and the only ones of any consequence, were settled well enough by the results of this accident. First, an ear will grow on again, even if the incisions by which it is detached are not smooth and clean; and second, the resultant scar is of no consequence, especially when it is located behind the ear.

Prevention of Diphtheritic Infection.

M. Hager, in the *Pharm. Centralblatt.*, recommends lozenges, composed after the following formula, to persons who are exposed to the infection of diphtheria:—

℞.	Ceræ alb.,	ʒ v	
	Colophon.,	ʒ iss.	M.

Melt together, and then add—

℞.	Tolutan. bals.,	ʒ iiss	
	Pulv. aromat.,	ʒ iss	
	Sacch. alb.,	ʒ v	
	Ac. benzoic.,	ʒ iss–iiss.	M.

Reduce to fine powder, and aromatize with—

℞.	Ol. cinnamomi,	♏x	
	Creasot.,	ʒ j.	M.

After the mass has cooled divide into 100 pastilles.

One of these lozenges should be very slowly masticated, four or five times daily.

Treatment of Fissure of the Anus Complicating Chronic Metritis.

Fissure at the anus is frequently observed in women affected with parenchymatous or endometritis. The most frequent cause for this affection is the chronic congested condition which exists about the anal region, as well as in the uterus and its appendages. In connection with this, there is almost constantly obstinate constipation. Surgical treatment in such cases is not always of benefit, particularly when the fissure has not induced contracture of the sphincters.

Two forms are observed in practice: In the first the fissure is of old date, and its borders are hard and callous.

In such a case, M. Chéron, in a recent number of the *Rev. med. chir. des maladies des femmes*, recommends that massage over the part, with the pulp of the index finger, should be made every day; then he places in the fissure a small metallic cylinder, connected with the negative pole from two elements of the pile, the positive pole having an electrode as large as possible.

Five minutes' application is sufficient to produce a modifying chemical action without causing any pain.

A calming unguent is applied each evening to the fissure:—

℞.	Ext. digitalis,	ʒ ss	
	Ext. belladonnæ,	gr. xvss	
	Adipis,	ʒ j.	M.

A dozen applications generally suffice for cure.

In the second form there are no indurated borders, but the parts are painful and sensitive when touched. In such a case iodoform is recommended:—

℞.	Iodoform,	gr. xvss	
	Balsam Peru,	ʒ j	
	Adipis,	ʒ j.	M.

If there is spasm of the sphincter muscle, gradual dilatation may be established by the introduction of a bivalve speculum, once every four or five days.

Dental Tumor of Jaw.

In the *Canada Medical Record*, Dr. C. E. Nelson relates the case of a girl of 15, who was suffering from a large tumor of the lower jaw, which had been steadily growing for about six months. For four months the pain had been so severe that morphia had to be used continuously. A distinguished surgeon diagnosed malignant disease, and advised immediate removal of the tumor, along with a considerable portion of the jaw bone. The day before the proposed operation, a dentist was consulted, who, after a careful examination, came to the conclusion that the tumor was not malignant, but was caused by the presence in the jawbone of several of the second teeth, which had not yet been evolved. The tumor was freely opened, a quantity of extremely fetid matter was discharged, and the pain was instantly relieved. A probe revealed that the anterior surface of the bone below the incisors had been absorbed, and at the bottom of the cavity so formed several hard bodies could be felt imbedded in the bone. The cavity was cleaned out and packed with lint soaked in a solution of chloride of zinc. Antiseptic applications were used regularly, but the wound continued to discharge a thick, black and very fetid fluid. By the end of six weeks three

teeth could be distinguished, viz., the right canine and two right lateral incisors, and at the end of three months these teeth were extracted through the opening made when the tumor was lanced. A year afterwards the cavity had filled up and the jaw returned to its normal shape.

Danger from Toy Paint Tablets.

As these small boxes of paint tablets are sold at very low prices to children at all the toy shops, it is right to call the attention of the profession to their dangerous composition. We read in a recent number of the *Revue d' Hygiene et de Police Sanitaire*, that a child was recently poisoned in Epinal from eating a green colored tablet. The central commission of hygiene procured a number of tablets from the toy shops of Epinal, and on examination found them to consist of sulphate or carbonate of calcium and an arsenical composition (either Scheele's or Schweinfurt's green), one specimen containing the enormous proportion of 20 per cent. of the arsenical color.

Certain it is that colors are made which are innocuous, but not at the price these small boxes are sold, and the matter should receive further and careful attention.

Epidemic of Tinea Tonsurans.

At the last séance of the Conseil d'Hygiene et de Salubrité of the Seine Department, M. Hillairet presented a very interesting report on the prevalence and rapid spread of tinea tonsurans in the 11th arrondissement of Paris. It was first particularly remarked in an orphan asylum, where it was imported by a day scholar; in a few days nineteen of the inmates contracted the disease. Energetic measures were immediately set on foot to arrest its ravages; the infected children were isolated in a special dormitory and not allowed to eat or play with the other inmates of the school. The treatment advised by M. Lailler consists in repeated epilation, frequent washing with castile soap, and applications with ointment containing turpeth mineral; in connection with this the children are obliged to wear continually a skull cap.

M. Hillairet, in attempting to trace the origin of the disease, found that there existed a number of cases among children and adults in the Charonne quarter, including several cases in the schools. As the disease is propagated with extreme facility, and requires, for complete cure, assiduous and long-continued treatment, M. Hillairet recommends careful search into the conditions of the arrondissement, and isolation as far as possible of the individuals affected. Without such precautions he fears a rapid spread of the evil to surrounding sections of the city.

In connection with the report, it is interesting to note that there is a corps of "epileurs" attached to several of the hospitals of Paris, demonstrating that such diseases are rather common.

Treatment of Scarlatina.

Dr. Lervis, we read in a recent number of *Le Progrès Médical*, recommends digitalis to limit the acceleration of the pulse in scarlatina and also as a prophylactic against renal complications.

The infusion of digitalis should be given as soon as possible after the début of the malady, and continued up to the third week. The whole body should be anointed with oil twice daily until desquamation is completed.

To prevent the development of diphtheritic angina he recommends the following potion:—

℞.	Potass. chlorat.,	ʒ j	
	Tr. ferri perchlorid.,	ʒ ij	
	Glycerinæ,	ʒ j	
	Aquæ destil.,	ʒ viij.	M.

A teaspoonful should be given every half hour.

Billroth on Removal of Cancer.

In the course of a letter from Billroth to Dr. Wywodzew, concerning the nature of the last illness of Pirogoff (a translation of which appeared in the Boston *Medical and Surgical Journal*), this great surgeon, discussing the propriety of operative interference for the relief of cancer of the jaw, from which Pirogoff was suffering, says: "Interesting and instructive as the results of the microscopic examination are in such cases, and the etiology of the development anatomically so well illustrated, the diagnois of cancer in this case would not have influenced me to an operation. A man over seventy, of active mental habits, yet showing all the signs of bodily marasmus, with a cataract in each eye, etc., has no possible chance of withstanding an operation such as I would have been compelled to make, even in order to prevent a recurrence for a very short period of time. My experience, of thirty years, as a surgeon, has taught me that those sarcomata and carcinomata which originate away back on the upper jaw can never be radically removed by operative interference, when one operates so as to provide for the probability of the patient surviving the operation. One is so disturbed in this region, partly by technicalities, part ana-

tomically, that a true and total extirpation cannot be made, save in those isolated cases where one has to do with an encapsulated tumor. I am no longer the bold, unterrified operator I used to be."

Manner of Administering Tannin.

Tannin, given by the mouth, either in powder or in simple solution, often gives bad results; sometimes having no effect, and often causing pain or inflammation of the stomach and intestines. At the polyclinic of Leipsic, this is avoided by the use of the following mixture, of agreeable taste, yet astringent, and easy taken by children; it is an albuminate of tannin:—

℞.	Tannic acid,	ʒ j	
	White of egg,	ʒ iij	
	Water,	ʒ iij.	M.

While adding the white of egg, the mixture should be continually agitated.

Treatment of Sycosis.

According to M. Bouchut (*Jour. de Connoissances Med.*), sycosis may sometimes be cured without epilation, by means of applications, made morning and evening with an unguent, of which creasote is the active element. He recommends the following formula:—

℞.	Creasot.,	♏xx ad fʒ ss	
	Zinci oxid.,	ʒ iss	
	Ung. simpl. benzoat.,	ʒ j.	M.

After each application of the ointment the affected parts should be covered with oiled silk.

Correspondence.

Dialysed Iron in the Treatment of Arsenical Poisoning.

Ed. Med. and Surg. Reporter:—

It is not my intention to enter into an exhaustive paper on the subject of Arsenical Poisoning, but simply, as a duty, to lay before the profession what I consider a most valuable aid, the administration of dialysed iron. In the smelting of lead and silver ores, one of the worst features is the constant inhalation of arsenical fumes. When first employed by the Alta Montana Company, to take charge of their hospital, a number of cases of arsenical poisoning came under my observation, and they were the more difficult to treat on account of their complication with "leading." I tried the various remedies recommended for such cases, with but poor results. At times I felt that old saying, "Throw physic to the dogs," was but too true and applicable. At last I was led to try dialysed iron, and was met in all cases with most gratifying success, as is evidenced by the following cases:—

Two carpenters were engaged in roofing a portion of the smelting building, and were in such a position that the wind carried the fumes into their faces. Some workmen below noticed one of the men swaying to and fro, and about ready to fall, while the other was laboring hard to reach the ground. They were helped to the hospital, and were suffering with severe pain in stomach and bowels, nausea, vomiting, vertigo, and with a profuse "nose-bleed," tremor in lower limbs, and almost prostration. A wineglassful of dialysed iron was given immediately. The nausea ceased, and at the end of one hour the men were able to walk to their cabins, carrying with them a bottle of the iron, to be taken in drachm doses every half hour. At the end of twenty-four hours they complained only of weakness, such as would result from a severe diarrhœa. The second day they resumed work, entirely free from all pain and effects of the arsenic. A number of men employed about the smelting furnace, and especially in dipping the molten lead, have been apparently prostrated, from the effects of the fumes, and were in every case relieved by dialysed iron. A mild purgative was given within twelve hours. I have recommended, and, indeed, insisted on, every man who is exposed to the arsenical fumes, taking a dose of the iron daily. The consequence has been, that we have had but one case of poisoning needing hospital treatment, and this one insisted that his case was one of "indigestion and dyspepsia," and would take nothing till compelled to enter the hospital, where, under the administration of dialysed iron, he speedily recovered.

In the past two years, I think I am safe in saying that fully two hundred cases of arsenical poisoning have been cured in this camp by dialysed iron. I could cite any or all of them, with symptoms, treatment etc., but I think it unnecessary, as they so nearly resemble those already mentioned; suffice it to say, that all experienced the nausea, griping, vomiting, muscular tremor, etc. I have given the iron, in half-ounce doses, three times daily, with no constitutional disturbances whatever, even after ten and often twenty days administration. The teeth are not discolored, bowels not constipated, and digestion not deranged.

The men have learned its virtues, and come regularly with "please fill my iron bottle again." They will not do without it, any more than an Irishman will do without his "salts and senna." It has saved many a man his wages and many a day of sickness. In fact, I feel convinced that this preparation is indispensable where men are liable to inhale the fumes of arsenic.

Without a remedy of this kind, I am satisfied no man, however strong, could inhale the fumes incident to smelting, where the ores contain arsenic, and stand it more than three or four days. I can fully and confidently recommend this preparation of iron to the profession, and even to foremen of smelting works where there is no physician, for it is harmless and in valuable. An ounce of prevention is worth a pound of cure;" or a "pound of cure," is worth infinitely more to a company, than are hospitals full of men poisoned with arsenic. Our hospital has been built, medicines bought, physicians

and nurses paid, and accommodations for thirty beds provided, inside of two years, by a small monthly assessment on each miner and laborer employed by the company, and all are satisfied ; none more so than the smelter hands, who can and do get a "bottle of that iron," and keep at work.

The preparation which I have used, and to the good effects of which I can testify, is Wyeth's, of Philadelphia. A. M. BULLARD, M.D.

Wickes, M. T.

Vaccination and Revaccination.

ED MED. AND SURG. REPORTER:—

On July 12th, 1881, I vaccinated Mrs. Sarah A. W., and her two children, William and James H., with Chambersburg virus. The vaccinations of all of them took, apparently, satisfactorily. The three had also been vaccinated in their infancy, the marks of which were still observable. William contracted smallpox in its hemorrhagic form, which terminated fatally, August 12th, 1881. Shortly after the death of William the mother and her servant girl took varioloid. James H. escaped. On April 6th, 1882, Sarah A. W. was taken sick, followed by an eruption simulating that of varioloid, but owing to the fact of her having had varioloid previously, I was uncertain as to my diagnosis ; but the prodromic symptoms, together with the eruption, undoubtedly pointed to a case of varioloid.

This brings us to the question as to whether one successful vaccination is a preventive of smallpox, or of its modified form? I believe, in the majority of cases, it is. It is a well known fact, however, that an attack of smallpox itself does not protect, in exceptional cases. the same person from a second attack. A patient has come under my observation who had suffered with confluent smallpox at two different times; the interval between the two attacks was thirty years. One case has also come under my observation, in which vaccination took perfectly well, notwithstanding that several years previously she suffered with varioloid. Now, if neither an attack of smallpox, nor of its modified form, varioloid, in some persons, is a preventive against a second attack of smallpox, or of its modified form, how much less, then, can one successful vaccination be a preventive of the disease? I believe, therefore, that the only safe plan of vaccination as a preventive of smallpox, is by repeating the vaccination with pure vaccine several successive times, at intervals of a month, until there is no longer any more predisposition in the persons so vaccinated to either vaccinia or smallpox. Had William and his mother been vaccinated each a second time, smallpox in the former and varioloid in the latter, I have no doubt, would have been prevented, the same as it was in the case of James H. JOHN M. BATTEN, M.D.

Pittsburgh, Pa.

Does Vaccination Protect.

ED. MED. AND SURG. REPORTER :—

Dr. Beggs, in the REPORTER, for May 6th, asks some pertinent questions in regard to vaccination. From my observation I could answer some or all of them, not so satisfactorily, perhaps, as by some facts from personal experience. My father's older brothers were inoculated with smallpox matter, according to the fashion of their time, and had the disease in a modified form. My father, being younger, was vaccinated, as he came within the time of that discovery, in his sixth or seventh year. When about fifty, one of the neighbors was sick, and father was with him much of the time. It was pronounced a case of varioloid, and a child in the family had the disease severely. Father saw numerous cases after that. His health was as good as any of his family during life. He never had any symptoms of variola. When seven or eight years old, I took some vaccine matter from a good looking pustule on a school girl's arm, and scratched it into my wrist. It "took," and worked characteristically. I have generally had good health since, and never a sign of skin disease. I have never been revaccinated. I have been in the practice of medicine for twenty years, and but few of them have passed that I have not had cases of smallpox to treat. Have seen it in its worst forms, and never had a symptom of the disease. My vaccination has protected me for forty years. Not long ago I took my little daughter into the buggy, to answer a call a little way out of town. We drove up to the fence, and getting out, walked up to the house and went in. It was close and dark, and when I could see my patient, I found him in the stage of pustulation of smallpox. The little girl had taken hold of the man's hand. I did feel some trepidation ; she is four years old. and had been vaccinated a year ago, with bovine virus matter. The time has passed for any signs of the disease. I expect she will be safe from its contagion all the rest of her life, if bovine vaccination is as good as humanized lymph, and she follows the example of her father and grandfather. Will some one else give their personal experience.

P. J. FARNSWORTH, M.D.

Clinton, Iowa, May 12th, 1882.

NEWS AND MISCELLANY.

Fourth Annual Congress of the American Laryngological Association.

Held in the Hall of the Medical Library Association, at Boston, on June 12th, 13th, 14th.

The President, Dr. F. I. Knight, of Boston, in the chair. Twenty-eight members present.

The first day's session was opened by an address of welcome, by Dr. S. W. Langmaid, of Boston.

The President then delivered his annual address, in which he called attention to the importance of laryngology, and the fact that this branch of medicine had received more attention within the past year, in all the medical schools of the country, and dwelt upon the great advantage derived by the general practitioner from the use of the laryngoscope. He entered more fully into the question of medical education, and especially the advantages derived by

the student from practical, clinical teaching of those branches in which personal observation is necessary. He then presented a plan for the practical teaching of laryngology, and said that the head of the department should give daily instructions for at least six weeks, in a room which could be darkened, and at the same time large enough to accommodate twelve students and as many patients, without crowding. It was his experience that these courses were given in rooms too small for the purpose, and consequently, the air in them became so vitiated that work could not be carried on with comfort in them. He concluded his address with the advice to the Association to raise the requirements of membership in the Association.

Dr. Elsberg then read an interesting paper on "Paralysis of the Vocal Cords," in which he gave a very clear and comprehensive classification of the different forms of paralysis, and also advocated a new nomenclature for the muscles of the larynx. He stated that unilateral paralysis was more common than bilateral, and that certain muscles were more prone to be affected than others. He also showed that spasm of the glottis might be present in such cases, and even alternate with the paralysis, sometimes necessitating tracheotomy.

Dr. Bosworth, of New York, said that he could see no advantage in the new nomenclature of the muscles of the larynx, and that in his opinion the classification prepared by Dr. Mackenzie, of London, into adductors and abductors of the cords, was so simple and comprehensive that he would prefer it to all other classifications. He also entered into the causes of the paralysis, and stated that they were either due to neuropathic or myopathic changes, and the latter were always caused by inflammatory infiltration in the muscular tissue.

Dr. Seiler concurred with Dr. Bosworth in preferring the old nomenclature. and objected to the function ascribed by Dr. Elsberg to the thyro-arytenoid muscle, viz.: that this muscle was a straightener of the vocal cords, and said that, owing to the peculiar insertion of the fibres of this muscle into the cords the latter must be drawn away from each other, and must be relaxed by the contraction of this muscle, thus making the edges of the cord concave.

Dr. Roe, of Rochester, reported a case of abductors of the cords, in which later brain lesions showed themselves.

Dr. Hartman, of Baltimore, reported a similar case, also due to central nervous disturbance.

Dr. Morgan, of Washington, said that double voice sometimes is produced by paralysis of the vocal bands; one of the sounds being produced by the membranous portion of the glottis, while the other is produced by the cartilaginous portion.

In closing the discussion, Dr. Elsberg said that he did not insist upon the adoption of his new nomenclature, but that he had found it more convenient than the old one. His reason for calling the thyro-arytenoid muscle a straightener of the vocal cords was, that when that muscle was paralyzed the cords were curved.

A paper sent by Dr. Glasgow, of St. Louis, on Laryngeal Asthma, was then read by Dr. Seiler. In this paper the author reported a number of cases in which asthma had co existed with laryngeal inflammation, and had been cured or greatly relieved by local treatment of the laryngeal mucous membrane. He came to the conclusion that in every case of asthma the larynx should be examined, and that if inflammation was found there it should be treated, for there were many cases of this affection which depended solely upon laryngeal irritation.

Dr. Jarvis, in discussion, reported two cases of hyperæmia of the cords complicated with asthma, which were relieved by local treatment.

Dr. Seiler said that he could readily understand how laryngeal irritation might produce asthma, when other peripheral irritations would produce a like result. He called attention to the fact that chronic inflammation of the larynx however, was, in many cases, due to nasal stenosis, and that the same cause, the mouth breathing, which produced the laryngeal irritation, might also directly cause the asthma.

Dr. Robinson, of N. Y., said it was an old fact that nasal obstruction was a cause of asthma, also that laryngeal irritation produced a like effect, but it was a difficult task to always locate the irritation in the larynx. Asthma was always due to organic lesion in the bronchial tubes, and he, therefore, was opposed to calling these cases laryngeal asthma.

Dr. Roe said that asthma might be due to irritation anywhere in the respiratory tract.

Dr. French, of Brooklyn, then exhibited some photographs of the laryngeal image taken by means of the laryngeal mirror in the living subject.

Dr. Morgan said he had made several ineffectual attempts to photograph the laryngeal image, but had not succeeded to his satisfaction. But that he had seen, several years ago, some made by Mr. Sleins. of Germany, which were tolerably good.

Dr. Elsberg said the difficulty was, that on account of the different planes in which the parts of the larynx were situated, all could not be brought into focus.

Dr. Seiler said that ten years ago he had tried to photograph the laryngeal image, but had failed, for the reason pointed out by Dr. Elsberg, and said that even if a good photograph could be obtained in a person accustomed to the mirror, it was impossible to photograph the larynx of a patient so as to obtain the pathological changes of the image, and this was the only utility of the process, in his opinion.

The session then adjourned to the afternoon.

AFTERNOON SESSION.

The first paper read was by Dr. Delavan, of New York, on

The Question of Hypertrophy of the Osseous Structure of the Turbinated Bodies, Practically Considered.

He said the design of this paper will be the establishing and the practical consideration of the following proposition, viz.: *The turbinated bones may, under proper conditions, undergo marked hypertrophy.* The opinion generally accepted upon this important question seems well set forth in the following paragraph, quoted

from a recent standard work upon "nasal catarrh." *

The author says: "The term hypertrophy of the turbinated bones is a faulty one, for the reason that real hypertrophy of these bones very rarely exists. Sometimes, indeed, it is true that one or more of them have become softer, more spongy, and more voluminous than they are in a perfectly healthy nose, but these are infrequent cases, and the very general rule is scarcely less true, *i. e.*, that hypertrophy is confined to the mucous membrane and submucous layer which cover these structures."

That this view is erroneous must be admitted, when due consideration is given, 1st, to the theoretical reasons which weigh against it, and, 2d, to the strong array of clinical evidence to which it is opposed.

1st. Theoretically, the process of hypertrophy in general may occur in almost any tissue of the body. Hypernutrition is, of course, the occasion of hypertrophy in bone as well as in other tissues, and to such structural changes the bones of the skull are particularly liable. To quote the familiar words of Sir James Paget: "Hypertrophy of bone presents itself in many interesting cases. It is usually a secondary process, ensuing in consequence of a change in a part with which some bone is intimately connected. Just as in their natural development and growth the bones of the skull are formed in adaptation to the brain, and those of the limbs are framed to a fitness of the action of the muscles, so in disease they submit in their nutrition to adapt themselves to the more active parts." †

The turbinated bones are not formed until a late period in the development of the fœtus. Indeed, "the inferior turbinated bone is ossified from a single centre which only appears at birth." ‡

This tardy appearance would imply considerable activity of development later in the history of the child, and it is not impossible to believe that in some cases there should occur an actual overgrowth. Again, although the condition of hypertrophy is antithetical with that of atrophy, there is no part which, being susceptible of one, is not also susceptible of the other. Atrophy of the turbinated bones, in the affection known as atrophic catarrh, is commonly met with and universally conceded to exist. Therefore, under conditions of nutrition opposite to those which characterize this disease, there should result the opposite condition of growth, namely, hypertrophy.

The probability of this result is greatly increased when we recall the peculiarly intimate relation which exists between the mucous membrane of the turbinated body and the bone, through the medium of the membrana mucosa, which not only forms a fibrous network for the support of the blood vessels, etc., but actually passes into the periosteum, the characteristics of which it more nearly resembles. Any increase of the blood-supply to the turbinated mucous membrane would be communicated, without doubt, to this periosteum in far more than the ordinary measure, and the nutrition of the bone proportionately increased. The conditions favorable to hypertrophy of the turbinated bone would seem to be—

1. Unusual space in the nasal fossæ.
2. Long continued hyperæmia of the structures investing the bone.
3. The existence of the above conditions during the period of greatest constructive activity.

It is an established fact that the too free inspiration of air through the nares will produce turgescence of the nasal mucous membrane, and where long continued, chronic hyperæmia. Persons, therefore, whose nasal cavities are unusually wide, are commonly the subjects of catarrh. In the normal nasal chamber the erection of the turbinated corpora cavernosa is limited by the boundaries of the nasal cavity. The greater the possibilities for expansion, and the more the exposure leading to congestion, the less likely are the soft parts to return to their normal conditions of size and nutrition. And, of course, the greater the hyperæmia of the soft parts, the greater the hypernutrition of the bone. With the above conditions occurring early in the history of the patient the hypertrophic process would go on, not suddenly and rapidly, but slowly, and in the course of the regular growth of the individual, not attaining its maximum until the adult period.

In the vast majority of instances the conditions which would furnish these factors would be congenital, and they would be found:—

1. In cleft palate.
2. In deviation of the nasal septum.

This first condition, however, is comparatively rare, and need only engage our attention by way of illustration.

Congenital *deviation* of the *septum*, on the other hand, is of frequent occurrence, and it is in this condition, theoretically speaking, that the largest proportion of cases of turbinated hypertrophy would appear. Of course, deflection may be produced at any time of life in a previous healthy septum; for example, by fracture or dislocation of its bone or cartilage, by pressure from an intra-nasal growth, etc. These instances, however, are unusual, and form the exception to the rule.

Reasoning by exclusion, therefore, the congenital origin of a large proportion of cases of deflection of the septum seems evident.

As will appear later, the middle turbinated bone is the one most frequently enlarged, and, since the septum is in a plastic condition until some time after birth, the question naturally arises, is the turbinated hypertrophy due to the deflection, or is the deflection due to the hypertrophy? If the turbinated bone was enlarged at an early date, why would it not, by crowding against the septum, force it beyond the median line, and thus become, not the result of the deflection, but actually its cause. This seems improbable, for two reasons: first, because nature is rarely asymmetrical, so that enlargement of one turbinated bone would probably be met by a corresponding enlargement of its fellow; and second, because the hypertrophied bone is almost invariably found opposite the point of

* "Nasal Catarrh," Beverly Robinson, p. 88, 1880.

† "Lectures on Surgical Pathology," Sir James Paget. Lindsay and Blakiston, 1865, p. 73.

‡ "Sharpey and Quain," vol. i, p. 72.

greatest concavity of the septum, in which position the opportunities for expansion are present in the most marked degree.

2. Turning now from theoretical considerations to the practical demonstrations of the main proposition, we desire to offer some anatomical and clinical evidence based upon direct observation.

About two years ago, while dissecting the nasal fossæ in a specimen which chanced to come into the Pathological Laboratory of the New York Hospital, the writer observed three points:—

1. There was well-marked deflection of the septum.

2. The side toward the concavity of the septum was completely occluded by the middle turbinated body.

3. Upon removing the soft parts from the middle turbinated bone, the bone itself was found to be in a condition of unquestionable hypertrophy.

The importance of this condition at once suggested itself, and its further investigation was immediately begun. To this end the museums of Washington, Philadelphia and New York were visited, and careful search for illustrative specimens made in the following craniological collections:—

	Crania.
Smithsonian Collection, Army Med. Museum, Washington. containing	4000
Academy of Natural Sciences, Phila.	2000
Wistar and Horner Collection, "	260
Wood Museum, Bellevue, New York	100
Hyrtl's Collection, College of Physicians, Philadelphia	140
	6500

In all these collections but the last, the crania were derived from every variety of source, and were in all stages of degeneration, so that the bony appendages of the nasal cavities were in most instances destroyed and the specimens unfit for our purposes. Far different was it, however, in the case of the splendid and unique cabinet of Professor Hyrtl, purchased by the Mütter fund for the College of Physicians, Philadelphia, and intended to exhibit a typical representation of every nationality in Europe. The specimens were derived indiscriminately from persons of at least average good health, and with no reference whatever, of course, to existence of any nasal deformity. In nearly every instance in which hypertrophy was observed, it was confined to the middle turbinated bone of the wider nares, which singular predilection can only be explained on the ground that, as this turbinated body occupies the position directed toward the greatest concavity of the deflected septum, its opportunities for expansion during life are greater than those of its fellows. In the case of a very few specimens the middle turbinated bones were broken.

The hypertrophy was, as a rule, symmetrical, extending throughout the whole antero-posterior course of the bone in about the same relative degree. It had about it nothing whatever of the nature of an exostosis, but the bony plates were of the same relative thickness as in the normal organ, the whole resembling a natural turbinated bone magnified in size. In some instances, however, they were notably thinner than normal, and the condition of general, symmetrical hypertrophy was by no means constant, the enlargement seeming rather to follow the course of the deflected septum.

An examination of the collection developed the following extraordinary statistics:—

Of the whole number of specimens	140	
There was deflection of septum in	18	$=12\frac{4}{5}$ p. c.
Of these 18 there was		
Hypertrophy of the middle t. b. in	11	$=7\frac{4}{5}$ p. c.
Absence or atrophy of " "	7	$=5$ p. c.
Or,		
Of the whole number of cases of deflection of septum	18	
There was hypertrophy of the m. t. b. in	11	$=60$ p. c.
There was absence of, or atrophy of, the m. t. b. in	7	$=40$ p. c.

It will thus be seen that in the above collection more than one-half of all cases of deflection of the septum showed hypertrophy of the middle turbinated bone. The actual percentage of cases of hypertrophy is probably much greater than 60 per cent., as in the several specimens in which the turbinated bones were missing, the middle turbinated bones were, without doubt, as judging from the perfect specimens, larger than normal. During the course of the above examination *exostosis of the septum* was not found in a single instance. In a number of cases the writer has demonstrated the presence of this bony hypertrophy in the living subject, by sounding, as it were, the enlarged mass with a fine needle, and observing the depth at which its point was arrested. Instead of entering the mass for some distance, as would be expected, it will frequently impinge upon bone at a point comparatively near the surface.

The figures above given will surprise those who believe that stenosis in deflection of the septum is caused by hypertrophy of the soft tissues alone, and that absolute relief will follow the removal or destruction of the redundant mucous membrane. Indeed, in several specimens examined, the middle turbinated bone had approached so nearly to the septum that it was scarcely possible to sweep a probe between them, and the occlusion was almost as complete as it could have been during the presence of the soft parts. No attempt at relieving the resulting occlusion simply by the removal of the mucous membrane could have succeeded. In such a condition the free inspiration of air must have been greatly reduced, while the olfactory region was shut off most completely, and all perception of odors thereby lost. The results of nasal stenosis, and the necessity for its relief, have been ably described by many excellent writers, and need not here detain us. Heretofore operative efforts have been directed solely to the relief of the occlusion of the narrower nostril. For this three general methods have been proposed—

1. Removal of the mucous covering of the convexity of the septum.

2. Removal of the mucous covering of the

convexity of the septum, together with the underlying bone.

3. Boring bodily through the nostril by means of the dental engine.

In all these operations the condition of the enlarged turbinated bone of the opposite side has been unrecognized. Any operation for rectification of the deflection of the septum would, in such a case, only result in making the occlusion of the wider nostril more complete than before, and since the nostril toward the convexity of the septum is often more pervious than the other the operation would fail of its object. Removal of the turbinated bone itself, entire or in part, is therefore essential. As to the propriety of the operation, there is no reason, anatomically or surgically speaking, why it should not be performed. In a recent article,* by so eminent an authority as Morell Mackenzie, it is warmly recommended, and he refers, for his support, to Valsalva, Fergusson, and Pirogoff, adding: "I have myself frequently removed portions of the turbinated bones without seeing any evil result follow, and it appears to me extremely doubtful whether any bad effect could result from the removal of a portion of one of them."

From what has been proven with regard to the anatomical conditions in deviation of the septum complicated with hypertrophy of the middle turbinated bone, we feel justified in asserting that the rational and scientific plan of operation for its removal would be as follows:—

1. Removal of the obstructing middle turbinated bone of the wider nostril, allowing at the same time, if possible, a remnant of the organ to remain, sufficient for the performance of its normal physiological function.

2. Straightening the deflected septum.

By this means will be obtained, we believe, all of the ends most desirable for the relief of this most uncomfortable and injurious condition.

CONCLUSIONS.

1. Hypertrophy of the turbinated bones is of frequent occurrence, especially in connection with deviation of the nasal septum.

2. Nasal and catarrhal conditions, stenosis, resulting from such hypertrophy, can be permanently relieved only by removal of the bone itself.

3. Removal of the bone is a justifiable operation.

4. In the existence of such hypertrophy no operation for the restoration of a deviated septum should be resorted to until after the removal of the opposing turbinated bone.

In the discussion following Dr. Seiler said he had seen several cases of hypertrophy of the turbinated bones, and that they all had been bladder-like expansions of the bony tissue, into which the drill of the dental engine entered very easily.

Drs. Ash and Bosworth, of New York, agreed with the writer, the latter stating that he had seen a number of cases, but had found that the tissue overlying the bone had also been hypertrophied. Dr. Ingals said that he was of the opinion that hypertrophy of the turbinated bone caused deflection of the septum, and not, as the writer had stated, that the reverse was the case.

Dr. Bosworth said all his cases had been on the right side.

Dr. Jarvis said that hypertrophy of the turbinated bones was very rare. Also, that the presence of hypertrophied turbinated tissue would produce thickening of the septum, which might be confounded with deviation of the septum.

Dr. Seiler said he was in the habit of measuring the thickness of the septum by means of a pair of callipers, and thus was at once enabled to make a differential diagnosis between localized thickening and true deviation.

Dr. Deblais, of Boston, said he had found deviation of the septum to be usually to the left in right-handed persons, and vica versa, and thought that the deformity was due to the use of the handkerchief.

In conclusion, Dr. Delavan said he had intended to convey the impression that the hypertrophy of the turbinated bones consisted in a bladder-like expansion of portions of the bone. He also said it was not certain at what time of embryonic life the septum is formed, but that it was certain that it was soft some time after birth. The most important part is the treatment, and in all cases the operation for deviation of the septum is necessary.

Dr. Bosworth then opened the discussion on ozæna, its pathology and treatment, and stated that ozæna was always due to atrophic changes in the nasal mucous membrane, and that the treatment should be mildly stimulant. There were but few cases of cured ozæna, but many cases could be made comfortable and the odor held in abeyance by cleanliness.

Dr. Robinson, in discussion, said that many cases of the disease were caused by catarrh following the eruptive fevers, such as measles, scarlet fever, etc. The fetid odor does not entirely disappear after thorough cleansing, and he believed that perverted secretion was the cause of the odor.

Dr. Johnston, of Baltimore, said he had seen a case of perverted secretion giving rise to fetid odor and due to disease of the parietal sinuses.

Dr. Roe said he had found thorough cleansing of the nasal cavities and insufflation of boracic acid to be the most successful mode of treatment.

Dr. Johnston thought that nasal catarrh and ozæna were different diseases.

Dr. Jarvis then read a report of a case of disease of the antrum simulating ozæna.

I think the subject of antral catarrh, as a secondary manifestation to chronic nasal catarrh, merits careful consideration. It would have probably received more attention if it had occurred as frequently as complications of the antrum in atrophic ozæna, and as catarrh of the antrum due to deep-seated tooth fillings and the presence of foreign substances in this cavity. An interesting case of this kind came under my observation last month. The patient, a lady, had been racked with almost continuous pain, extending over three weeks in duration. She had suffered with hypertrophic nasal catarrh for many years. The pain was unilateral, being largely limited to the right side of the face;

* Nasal Polypi, etc., *Archives*, Vol. III, No. 2.

it coursed through the cheek, and by reason of the involvement of the anterior and posterior dental nerves, there was much odontalgia. The patient, almost crazed at times by intense suffering, had become dependent upon powerful narcotics to obtain relief. By gradual increase the doses of these drugs have become alarmingly large. Hearing was imperfect on the right side, and there was much conjunctival congestion. In spite of the expostulations of her dentist, she had one of the right upper bicuspids, removed.

The patient consulted the New York ophthalmologist, Dr. Mullendorf, who referred her to me, for a tumor of the nostril.

A large, inferior turbinated hypertrophy completely occluded the right nostril. I pierced it with my transfixion needle, and removed it with the ecraseur. A stream of fetid pus poured from the nostril on the withdrawal of the excised tissue.

With the assistance of Dr. Henry, I carefully treated the antrum, obtaining immediate relief, and in three weeks a permanent cure.

I believe the antral disease was, in this instance, brought about by the pressure of the hypertrophied tissues disorganizing the valve of the antrum, thus permiting the acrid catarrhal discharges to enter this cavity, but preventing their exit.

Dr. Langmaid said he had seen cases in which other secretions also had been perverted, and had given rise to a fetid odor.

Dr. Rumbold, of St. Louis, showed a nasal douche, for the thorough cleansing of the nasal cavities in these cases.

Dr. Ingals thought insoluble powders should not be thrown into the nasal cavities, as they gave rise to irritation, and that solutions were better than powders.

Dr. Hartman made mention of Gottstein's method of treating ozæna with cotton tampons, and stated that he had found no advantage in this method over others.

Dr. Seiler concurred with Dr. Hartman.

Dr. Bosworth, in closing the discussion, reiterated his statement, that if the nasal cavities were thoroughly cleansed no odor would remain, but that in many cases it was difficult to reach all portions of the nasal cavities with the cleansing solution. The odor was due to decomposed animal matter retained in the nose. Rhinitis hypertrophica and rhinitis atrophica cover all cases of catarrh, and include ozæna. The proper treatment for the latter disease is stimulating applications to the mucous membrane, and that the cotton tampon acted as a stimulant, therefore it did good, but it had the objection of being inconvenient to the patient.

Second Day.

Tuesday's session opened with a business meeting, in which, among others, the report of the Committee on Nomenclature was conditionally accepted.

After the business meeting Dr. Ingalls read a paper on Deflection of Septum, in which he said that deflection of the septum narium may be of traumatic origin or spontaneous; the latter most common. The cartilage and bony septum are both bent in many cases, the latter being apparently the mechanical result of firm articulation with the cartilage, in which the flexion usually commences. The flexion in cases of spontaneous origin apparently results from hyperplasia of the cartilage, the growth taking place mainly at the edges, as a result of which growth the cartilage is enlarged, and because of its position (being set as it were in an unyielding frame) the cartilage is forced to bend.

Causes traumatic or spontaneous; the latter can result from hyperæmia of the parts—chronic catarrh.. Patients apply for relief because of obstructed respiration or bending of the nose. Usually find also excessive secretion from nasal mucous membrane and alteration of voice. As a rule, crooked noses are caused by flexion of the septum, which pushes the point of the nose toward the side of the concavity. For convenience of description they are divided into four classes:—

1st. Those in which there is simple bending of septum with a uniform concavity on one side and a corresponding convexity on the other.

2d. Those caused by direct injury, in which there is more or less bending of septum, with depression of nose, depending for the extent of the deformity on severity of injury, etc.

3d. Those in which flexion occurs only in cartilage, near nostril. This flexion may be so great as to occlude nostril by a nearly horizontal plate of the bent cartilage. These cases usually associated with considerable deformity of nose, due to crowding of its point to one side.

4th. Those in which flexion causes a longitudinal ridge running along the course of the articulation of vomer and cartilage.

In cases of spontaneous origin the process continues for an uncertain time, though probably in most cases at least two years.

Several operations have been recommended, the most prominent of which are those of Chassaignac, William Adams, and Goodwillie, but these have been more or less modified to suit individual cases.

In the first class of cases often no operation is needed, though Adam's operation would probably correct the deformity.

In the second class Adam's operation, or Steel's modification of it, is most suitable.

In the third and fourth classes no operation seems likely to be permanently successful which does not include removal of the redundant tissue.

Simple perforation is not to be recommended, because it will not cure the catarrh or remedy the deformity; besides, it favors the formation of scabs, etc.

For these cases the operation preferred consists of separating the mucous membrane, removing the redundant tissue, replacing the membrane, and then holding the septum in position until firm union has taken place. Anæsthetic to be used. Posterior nares of the closed side to be plugged before operation is begun. Just enough of septum to be removed, so that when returned to its normal position, the cut edges will be in apposition. The cartilage must be kept in position for some time by plugs in nostril. The result will be correction of deformity of nose, removal of nasal obstruction and its accompanying symptoms,

obstructed respiration, catarrh, and change of voice.

Then Dr. Jarvis read a paper on "A New Operation for the Deviation of the Nasal Septum," in which he advocated the removal of the projecting portions of the septum, by means of his wire snare, and claimed as the advantages of this over other operations, the bloodlessness and exemption from pain.

And Dr. Shurley read a report of two cases of lupoid ulceration of the septum, pointing out the difficulty of making a differential diagnosis between the ulcerations of lupus and those of syphilis.

These three papers were discussed together, and the discussion was virtually a reiteration of the opinions expressed in the discussion on Dr. Delavan's paper in regard to the causation of deviation of the septum.

Dr. Shurley, however, in closing the discussion, called attention to the value of iodoform as a local application in lupoid and syphilitic ulcerations.

AFTERNOON SESSION.

The session was opened by the reading of a paper on "Impaired Cardiac Power as an Efficient Cause of Congestive Affections of the Throat," by Dr. Beverly Robinson, of New York, in which the author called attention to the frequent occurrence of congestion of the upper air passages, due to loss of power in the heart, muscles, and to venous congestion, and that the proper treatment of such cases was the exhibition of heart tonics, combined with local astringent applications to the larynx and pharynx.

Dr. Shurley said, in the discussion following the reading of the paper, that he had met with cases in which the congestion of the larynx had been due to impaired power of the heart, and had found that local applications alone were of no avail in the treatment, but that they had at once improved under chloride of iron, with tincture of digitalis. He then said the ultimate causes of disease of the throat were too often overlooked by specialists, and the local symptoms treated heroically, when some other more central organ was the cause, without giving relief to the patient.

Dr. Seiler fully endorsed Dr. Shurley's remarks, and related a case in illustration. A young girl, presenting herself for treatment of some throat affection, he found, on examination, a general relaxation of the mucous membrane, and asking a few pointed questions, arrived at the conclusion that uterine disease was the cause of her throat trouble. He then advised the patient to tell her family physician about her uterine symptoms, and place herself under treatment for them, as local treatment of the throat would be of no avail in her case. The patient answered by saying, "Doctor, if I had known that you could see all the way down, I would not have come to you."

Dr. Daly also endorsed Dr. Robinson's views, and called attention to the frequent occurrence of pharyngeal disease due to gastric irritation.

A paper by Dr. Harrison Allen, on Pharyngeal Irritation, was then read by the secretary, which was chiefly a dissertation on the anatomical structure of the pharynx and soft palate. Dr. Allen advanced the theory that swelling of the pharyngeal tonsil and the presence of nasal polypi caused spasmodic contraction of the muscles of the soft palate, thus making rhinoscopic examination difficult, if not impossible.

Dr. Bosworth said that in his experience the presence of polypi in the nares did not interfere with rhinoscopic examination.

Dr. Ingals said he was in the habit of making the rhinoscopic examination first, as he had found that after irritation of the pharynx had been produced by the laryngeal mirror it was much more difficult to obtain a view of the parts.

Dr. Daly said that telling the patient to breathe through his nose while the mirror is in situ, caused the soft palate to drop and facilitated rhinoscopy.

Dr. Knight then exhibited a case of "Aphonia Spastica," or laryngeal stammering, which was examined by the members present. After the patient had retired he said that the disease was a rare one, and that he had not seen a case until after the paper of Schnitzler had been published. It was progressive, and considered incurable, and was produced by a spasm of the tensor muscles of the vocal cords and of the respiratory muscles. He was treating the patient by galvanism and gave him nerve tonics.

Dr. Longmaid said he had a similar case under observation, in which, lately, symptoms of degeneration of the spinal cord had appeared.

Dr. Elsberg said he would advise vocal gymnastics in addition to the galvanism and nerve tonics, and thought the prognosis was not hopeless in those cases which did not depend upon central nerve lesions.

Dr. Daly then read a paper on Catarrh Involving the Antrum, and its treatment, which was a report of two cases of antral disease with extremely fetid discharge which were cured by removing a tooth, opening the antrum and treating its lining mucous membrane with astringent injections.

Dr. Shurley said he had seen two cases of antral disease, but without offensive discha ge, and had treated them by opening the antrum and by injecting a strong solution of chlorate potassium.

Dr. Seiler then opened the discussion on Laryngeal Ulcers, and said that there were several kinds of ulcerations of the mucous membrane of the larynx. First, abrasions, which amounted to mere lacerated loss of epithelium, and were not covered by pus, occurring mostly in those parts which were subjected to friction, such as the edge of the epiglottis and the interarytenoid space. Second, shallow ulcerations, involving the whole depth of the mucous membrane, and covered with creamy secretion, resembling pus. The so-called catarrhal ulcerations, also chiefly found in the parts most exposed to friction, and third, the deep destructive ulcerations, which affect and destroy the tissues below the mucous membrane. The latter are always due to some specific poison in the system, such as syphilis, or tuberculosis, and are invariably the result of the breaking down of gummata in syphilis, and cheesy deposits in phthisis. The syphilitic ulcerations had the peculiarity of being symmetrical on both sides, and that the shallow catarrhal ulcer

was also observed in this disease, as well as in ordinary catarrhal inflammation.

Dr. Bosworth said he did not believe in the so-called catarrhal ulcer without a specific cause, and that the shallow ulcer of syphilis was due to ulceration of mucous patches. If there was no catarrhal ulcer then no ulcer existed in the larynx that was not due to specific cause.

Dr. Jarvis said that he also did not believe in the existence of a catarrhal ulceration, but that he had met with ulcerations of the mucous membrane, not due to either phthisis, or syphilis, or cancer—especially in the mouth.

Dr. Robinson said he had seen in catarrhal laryngitis, lenticular abrasions in the laryngeal mucous membrane, which might be called catarrhal ulcers, which resembled closely the abrasions seen in herpetic pharyngitis, and that probably the so-called catarrhal ulcer was nothing but a herpetic sore.

Third Day's Session.

The session was opened by the reading of a paper by Dr. Wagner, on "A Case of Expulsion of the Ossified Arytenoid Cartilage following Thyrotomy." The author not being present, the paper was read by the Secretary. In the paper, the author related the history of a case of papilloma of the larynx, which for its removal necessitated the operation of thyrotomy. The thyroid cartilage was found to be ossified, and had to be cut with a saw. Three weeks after the operation the patient was discharged as cured, but returned to the hospital three weeks later bringing with him a piece of bone which had been expelled during a fit of coughing. This, on examination, proved to be the ossified left arytenoid cartilage.

Dr. Seiler said that he had seen two cases of loss of arytenoid cartilage, in one of which the cartilage had been expelled during a fit of coughing. In both cases the perichondritis had been due to syphil s.

Dr. Longmaid then opened the discussion on the "Physiology, Pathology and Treatment of the Singing Voice." He said the subject was too extended to be discussed within the limited time at the disposal of the Association, but that he had a few points he would bring before the meeting. First, the effect of slight catarrhal inflammation of the cords upon the voice. He had observed that under such conditions the voice of singers was passable up to a certain point, but that beyond this the voice gave out entirely. The removal of the inflammation restored the voice. Second, the influence of the nasal cavity upon the voice; and thirdly, does excision of the tonsils injure the voice or not. He thought that excision of hypertrophied tonsils did not injure the voice, but improved it. He then showed a case of hypertrophied adenoid tissue of the vault of the pharynx, in which the quality of the voice was much altered.

Dr. Jarvis said that the alteration of the voice caused by nasal disease was very readily demonstrated, and that frequently chronic inflammation of the vocal cords was due to nasal catarrh.

Dr. Seiler said that, in a paper read at the last meeting of the Association, he had proved that the nasal cavities exerted a very great influence upon the voice, and stenosis, or even narrowing of the nostrils, would produce an alteration of the voice.

Dr. Roe said he concurred with Dr. Jarvis and Dr. Seiler, that the nasal cavities greatly affected the voice, and called attention to the evil results of overstraining of the voice, after a prolonged rest, in singers.

Dr. Ingals deplored the want of unanimity of opinion in regard to the effect of nasal disease upon the voice, and said he was of the opinion that unless the voice was greatly altered, an operation within the nose was uncalled for.

Dr. Jarvis took exception to this statement, and said that if there existed any encroachment upon the normal calibre of the nasal cavities, it should be removed. If it did not alter the voice then, it would certainly do so in the near future.

Dr. Deblais related a case of a male soprano, who, through nasal disease, was prevented from singing in public, and after the cure of his catarrh was again able to sing.

All the members were unanimous in the opinion that tonsillotomy does not interfere with the voice.

Dr. Morgan said that the concerted singing of children in public schools was very injurious to the voice, and that, in his experience, many cases of chronic throat disease had their origin in this pernicious practice.

Dr. Roe then opened the discussion on the utility of topical applications in chronic laryngitis, calling attention to the indiscriminate use of the brush or probang by the general practitioners, in the treatment of throat diseases.

In the discussion which followed the members were unanimous in the opinion that local and general treatment should be combined. The meeting then went into executive session, and elected the following officers for the ensuing year: President, Dr. G. M. Lefferts, New York; First Vice President, Dr. Carl Seiler, Philadelphia; Second Vice President, Dr. F. Ingals, Chicago; Secretary and Treasurer, Dr. D. B. Delavan, New York; and decided to meet next year in New York City.

Medical Banquet at Little Rock.

On Tuesday, June 1st, the physicians of Little Rock tendered a complimentary banquet to the Arkansas State Medical Society, in session at Little Rock. The bill-of-fare was handsomely printed on an amputating saw, made of cardboard. The following toasts were proposed and responded to:—

1. "The State Medical Society of Arkansas"—A. N. Carrigan, M.D.
2. "Our Retiring President"—R. G. Jennings, M.D.
3. "Our President Elect."
4. "Saddle Bags."—W. H. Hawkins, M.D.
5. "The Music in Medicine"—T. E. Murrell, M.D.
6. "Our Medical Colleges"—Wm. Thompson, M.D.
7. "Our Bachelor Brethren"—J. H. Lenow, M.D.
8. "Ye Jolly Doctor"—J. M. Keller, M.D.

Card from Prof. John J. Reese.

To the Editor of the Medical and Surgical Reporter:—

DEAR SIR: I beg to avail myself of your courtesy, to correct an error in connection with the report in last week's daily papers of an autopsy made by myself and Dr. Cadwalader, acting Coroner's Physician, of a woman supposed to have been drowned in the river Delaware.

The reporters of the case, in their desire to make it as graphic as possible, have put *their own* interpretation upon the results of this autopsy, while making it appear to the reader that they are expressing *my* views; and inasmuch as these inferences do not seem to me to be fully warranted from a single isolated case, especially where there was no absolute proof that the death was *caused* by drowning, I do not wish to be considered as endorsing the rather premature conclusions attributed to me by those well meaning but over zealous reporters.

Certainly, the leading authorities all teach that the presence of water in the lungs and stomach (especially the former) constitutes the most reliable evidence of death from drowning. And the entire absence of water from both the lungs and stomach, in the autopsy referred to, was undoubtedly a very noticeable feature, *provided* we were certain that drowning was the real cause of death, which we were not, as the case was one of a multitude of similar ones on which the Coroner's jury pronounces the usual stereotyped verdict of "found drowned."

It is evidently a very important point for the legal physician to settle: What are the positive, unequivocal signs of death by drowning? It may, in truth, become the *vital* point to establish in a capital case, as would appear to be the fact in the now pending Malley case. But in order to establish an important scientific truth, the experiments should be repeated, under varied circumstances, until every doubt is removed.

I may be permitted to say, in this connection, that I am now engaged in investigating the post-mortem appearances in cases of death from drowning, as a legitimate object of inquiry connected with medical jurisprudence; but I had not the remotest idea that the results of the late autopsy, which was conducted with the strictest privacy, and which was only part of a series of observations of a similar nature, would have fallen under the ken of the ubiquitous "reporter," and been made to assume a coloring not designed by myself.

JOHN J. REESE, M.D.

316 *South Twenty-first St., June 26th*, 1882.

The Berlin Hygienic Exhibition.

Careful investigation of the ruined Hygienic Exhibition has resulted in the unfortunate conclusion that nearly a year must elapse before the buildings and collections can be sufficiently restored to open the exhibition. It would seem that the preparations to meet emergencies, particularly the supply of water in case of fire, were totally inadequate, and also that, to save money, the directors had purchased the well-dried materials from the committee of least year's Industrial Exhibition in Halle.

Items.

—Drs. Fordyce Barker, Austin Flint and John G. Adams, have been appointed delegates from the New York Academy of Medicine to the International Congress of Hygiene, which meets in Geneva, Switzerland, from the 4th to the 9th of September.

—It is announced that the French Minister of Marine has placed at the disposition of M. Alphonse Milne-Edwards the vessel, Le Travailleur, for a dredging expedition in the Bay o Biscay, as far as the Canary Islands. The operations, which are to be made with a view to studying the fauna and flora in deep sea, will take place during July and August.

The Sweating Sickness of the 16th Century.

The Boston *Medical and Surgical Journal* contains an interesting account of this strange disease that visited England five times in the early part of the 16th century, and carried off over thirty thousand victims. The disease usually began with a little fever, possibly a slight pain in the head and heart; when suddenly a most profuse sweating would occur, by which such great prostration was produced that in many cases the victims died in two or three hours. It would seem that the disease was due to defective hygienic surroundings and to improper modes of life. Drugs had little or no influence over it. The disease was not always fatal, nor did one attack protect from a second. Cardinal Wolsey was four times attacked. The disease has now disappeared from England, but it was observed among the Turks during the Crimean war, in the hospitals at Scutari.

QUERIES AND REPLIES.

T. C., of Pa., is answered as follows: When the twins are male and female, the latter is called "Free Martin;" when full grown resembles a steer, and does not conceive; highly esteemed in England for beef cattle.

MARRIAGES.

CLOW—SARVER.—On Thursday, June 1st, 1882, at the residence of the bride's parents, 210 Locust street, Allegheny, Pa., by Rev. J. W. Witherspoon, assisted by Rev. J. Sarver, of Luchburg, Pa., Miss Maggie A. Sarver, daughter of William Sarver, M.D, and Mr. Will. E. Clow, of Chicago, Ill.

PECK—WILLIAMS.—At West Livingston, N. J., Wednesday evening, May 17, 1882, by the Rev. J. A. Ferguson, E. E. Peck, M.D., of Caldwell, N. J, and Nellie L'Hommedieu, only daughter of J. C. and Agnes J. Williams.

REYNOLDS—SMITH.—In this city, May 29, ult. at the residence of the bride, No. 1324 Hanover street, by Rev. Dr. M. T. Eva, A. Sidney Reynolds, M.D., and Miss Lizzie Smith, all of this city.

SEAMAN—TOWNSEND.—At St. Paul's Episcopal Church, Glen Cove, Long Island, June 8, 1882, by the Rev. Dr. John C. Middleton, Richard F. B. Seaman, M.D., and Sadie L., daughter of Mary Embrie and the late Frederic E. Townsend.

WENTZ—ULP.—On Thursday, June 1, 1882, at St. Barnabas P. E. Church, Haddington, West Philadelphia, by the Rev. John G. Bawn, Alexander C. Wentz, M.D., of Hanover, Pa., and Miss Clara B. Ulp, of West Philadelphia.

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Communications.

THE ELECTRICAL BATH.

A Paper read before the Albany (N. Y.) County Medical Society,

BY W. O. STILLMAN, A.M., M.D.,
Of Saratoga Springs, N. Y.

The administration of electricity through water is almost synchronous with the discovery of that agent, and the use of water has ever since almost always accompanied its application in one way or another. Its use through the medium of the thermal bath, in the manner which I am about to describe, is, I think, a recent innovation, and one which I am sincerely convinced possesses very great remedial virtues, and which is destined to occupy a high position in the esteem of the profession.

This is said after a four years' experience in its almost constant employment in a great variety of diseases, principally chronic, and I think it fully deserves to rank, in its special line of application, with the Turkish and Russian baths in their special lines, as of equal if not superior merit; while as a simple tonic measure I know of nothing that equals it.

In looking over the standard writers on the subject of electricity very little mention is made of its use in the bath. Gerratt, Althaus, Beard and Rockwell, and others, mention the electro-chemical bath, by means of which it is alleged that various mineral substances, such as lead, mercury, silver, etc., have been extracted from the human body. As I have had no experience with this process, first presented to the profession in 1855 by M. Poey, through a paper read before the French Academy, and as its claims are, I believe, without scientific support, I have nothing to say concerning it.

There is little or no mention made of electricity, administered by means of a bath, in any of the standard works upon materia medica or therapeutics, and it is only in such writers as Tibbits, Beard, and Rockwell and Schweig that even a passing reference occurs. The latter, indeed, enthusiastically urges its merits at length, but the first two concede the possibility of its value in a reluctant manner and with but crude explanations of its thorough and rational application.

In using the term "electro-thermal bath," I employ it in a very restricted sense. It is intended to refer only to the use of the *faradic* current in the warm or hot bath, applied principally through the medium of the water, and on the principle of general faradization, which has attracted so much attention of late among well recognized specialists, from its satisfactory results. The galvanic current, which I have also used in the bath, has not been found so useful as when applied locally outside the tub. As I have used both the faradic and galvanic currents, both in and out of the bath, and side by side, for several years, and have seen their effects in at least five thousand applications, I may at least claim to have studied various sides of the subject, and to be not especially prejudiced in favor of the method of which I am speaking. Indeed, I have made more use of the galvanic current out of than of the faradic in the water.

As I am *not* an electric specialist, I hope to speak without a specialist's unintentional bias or

prejudice. Neither do I wish to be understood as regarding electricity in the least—in any of its forms of application—as a cure-all or panacea. In speaking of my special topic I only urge it as an improved method of administering this valuable agent in certain cases and for certain maladies.

A brief description of the bath and its appliances is necessary for a correct understanding of its therapeutical uses. Its requisites are very few and simple. A battery, connections, electrodes, a tub and water, are all that is needed. Any non-conducting material, such as wood, porcelain, soapstone, vulcanized rubber or glass, may be used for the tub. It may be of the ordinary size and shape, but is preferably somewhat deeper and without the inclined plane at the head, which would interfere with the movement of the electrodes. A metal rod is placed in a deep groove running the entire length of the tub on either side, and within a couple of inches of the top. To each of these rods is appended a single electrode, which may be slid along on the rod from one end of the tub to the other, its connection with the battery being constantly maintained by means of the rod. Both rods are connected with the battery, one with the negative the other with the positive pole, but so arranged that by the aid of a commutator the current and the poles may be reversed at pleasure.

The electrodes may be either of carbon or metal, and should extend at least eight or ten inches below the surface of the water. In addition to these a single ordinary movable electrode is provided, which may be applied to the person at special points, as desired. This should then represent one pole and the tub electrodes the other. All that remains is to provide any good induction battery of large quantity, and connect it with the tub as described.

The administration of the bath is as simple as the apparatus. It may be passed in descending current from one shoulder to the opposite foot, then from the opposite shoulder to the other foot. It may be passed through the liver, as a stimulus to that organ, through the bowels, for constipation, assisted in both instances by the movable electrode if desired, or the use of a rectal electrode in the latter case, in place of the sponge. It may be passed through the hips and thighs, for sciatica, or the legs or arms, for atrophied muscles, paralysis, rheumatism, gout, etc., or applied locally, for neuralgic pains, anæsthesia, disturbances of sensation, etc., at almost any point on the person. For general tonic purposes excellent effects are obtained by passing the movable electrode over the spine, the two attached to the tub being placed by the feet and the current being so adjusted that they represent the negative and the movable electrode the positive poles of the battery, respectively.

The various special applications, or modifications of those suggested, are, of course, endless, and would readily suggest themselves to the operator as indicated by the individual needs of each case. The duration of the bath is usually about fifteen minutes, but may vary five minutes either way, and in some cases has to be limited to a still shorter time. The strength of the current has to be determined, as in most cases, by the sensibility of the patient, and the length of the vibrations by the judgment of the electrician.

Concerning the merits or superior advantages of this method of applying the faradic current considerable may be said.

It has been my experience, in using it in this manner in a large number of cases, that it has unquestionable advantages, in certain lines of maladies, over either the galvanic or faradic currents out of the water, and both methods have, as I have said, been used side by side. There have been seen very marked and satisfactory recoveries or improvements resulting from its employment, more, in my judgment, than could have occurred by the older plan of administration.

A number of years ago Drs. Beard and Rockwell called the attention of the profession to the use of what they called "general faradization," and insisted so strongly upon its merits that it was freely tried on both sides of the Atlantic. Many leading physicians endorsed its use, and prescribed it with excellent effects. "General faradization," according to them, consisted in simply faradizing the system generally, in detail; the use of the hand as an electrode being strongly advised. There can be no doubt that most excellent results have been obtained in this manner, but that the bath, more thoroughly and effectually, more agreeably and generally, and that with less fatigue and inconvenience to both patient and operator, accomplishes the same ends, seems to my mind a matter of no doubt. If the object of general faradization is to reach all parts of the body uniformly and completely, the bath accomplishes that object more effectually than any other plan. If it be to produce localized effects on any portion of the body, that also can be as efficiently and more gently accomplished. If the use of the hand as an electrode be urged, the water offers an agent as adaptive, as soothing, and more conductive, and which, at the same time, greatly increases the conductivity of the parts.

A not unimportant factor in administering electricity is the resistance offered by the skin. It is often like sending the current through a deal board, so dry, and hard, and cold, and consequently non-conductive, is it. Poore, the English electrician, calculates that the resistance offered by the body to the passage of electricity is four times greater than that of an Atlantic cable. Hot or warm water overcomes this as effectually as any means, and when applied in considerable quantity, as in the bath, the afflux of blood to the skin vastly increases its conductive power in addition to simply moistening the exterior. The person is also protected from atmospheric exposure by the even temperature of the bath, and from the cold consequent upon the evaporation of the warm water ordinarily used on the sponges of the electrodes. The liability to a cold after a warm bath is generally considered by electricians, I believe, to be greatly diminished by the use of the electricity. In my experience it almost never occurs.

The advantages claimed for this method may be briefly reviewed as follows: Where the bath is used as a general tonic, or for the relief of a disease affecting large portions of the body, as paralysis, rheumatism, etc., the electricity can be applied more thoroughly and gently, agreeably if you choose, and with better results, than by the usual plan. Its application to the surface is equalized; the skin is in better condition to conduct the current; it is less fatiguing to the patient; the vaso-motor system and nutrition and innervation are more profoundly affected; and some of the uncomfortable features of general faradization are obviated.

If it is desired to secure localized effects, they can be attained by means of the movable electrode, or often by the position of those attached to the tub. Local and diffused effects can in this way be secured at the same time, if desired. Where *strictly* local treatment is indicated, as in aphonia, neuralgia affecting a single extremity, writers' cramp, bronchocele, etc., I do not claim a special advantage for this method over the one ordinarily employed, and it certainly involves unnecessary labor in dressing, drying, etc. The additional inconveniences, however, attending the bath, over "general faradization," are practically insufficient to require consideration.

One or two practical points, and I will only detain your attention long enough to give a resumé of the diseases in which I have seen its use attended with the most beneficial results. A surgeon to the Massachusetts General Hospital once told me, "why you can get little or no electricity in the water in that way, without touching the electrodes. All I can say is "try it." I have seen a strong man doubled up as though he had been struck in the epigastrium by a club, in determining that point. From strong spasmodic muscular contractions the current can easily be so graduated as to be felt only as though a gentle breeze were blowing on the skin.

In regard to age or constitution, I have seen it used with equally good effect by children and old people, delicate and robust. The temperature of the water usually ranges between 90 and 100° Fah., the average being 95°. The baths may be given from one to three times weekly. It has been my experience that little or no better effects result from using them any oftener. They should not be used too soon after meals. It may be necessary to continue them a number of weeks before improvement shows itself, although, as a rule, this is not the case, amelioration of symptoms and manifestations of the disease usually occurring early, if any benefit is to be derived. In a very small percentage of cases these baths cannot be taken. These exceptions usually occur in those who cannot take the faradic current in any form of administration, or who cannot take a warm bath. With these the galvanic often answers admirably. I have not observed that some temperaments will bear electricity in the bath which will not tolerate it elsewhere, as has been stated by some observers.

The field of diseases to which this bath is applicable is quite wide, and embraces many of those which are most commonly met with. It is not by any means confined to diseases of the nervous system. Rheumatism, gout, dyspepsia, general debility, constipation, malaria, sluggish liver, nutrition and circulation, benign tumors, simple muscular atrophy, amenorrhœa, impotence, sprains, synovitis after the acute stage, opium habit, alcoholism, etc., are among the most prominent of those met with in which its exhibition is attended with marked beneficial results.

In rheumatism, whether in the acute, sub-acute or chronic stages, its effects are often almost magical, the therapeutical effect of the hot water being superadded to those of the electricity, besides being efficacious. It is certainly a most agreeable way of applying this agent in this malady. The same holds true in regard to gout, which is not, however, so uniformly cured.

In general debility I know of no single remedial agent which produces such excellent results. A person, before taking the electricity, may be oppressed by a feeling of lassitude and weari-

ness, but will come out of the bath doubling up the biceps, to show his spirits, and with a delightful feeling of buoyancy and invigoration. The circulation is quickened, and the cutaneous capillaries learn the lost art of dilating again. The appetite is often markedly improved, tissue metamorphosis is hastened, the liver and bowels are stimulated, the general functions of nutrition assume a new activity.

In constipation and dyspepsia, its use is often attended with great improvement or recovery, but not more so than with many other means. In malaria it seems to be a very useful eliminator and tonic, fortifying the body against the inroads of the subtle poison. In torpidity of the liver it offers a direct stimulant, potent and efficient. In simple muscular atrophy it is almost the remedy *par excellence*, and does a great deal toward restoring lost functions and strength.

In benignant tumors of various descriptions it has not proved nearly so reliable as the galvanic current, in my experience, although often valuable, alternated with that current. For amenorrhœa, with the vaginal electrode, it offers one of the most powerful agents with which I am acquainted; indeed, it will often bring the menses on before their time—an accident to be guarded against. It is also quite useful in impotence. In both sprains and synovitis, I have seen marked improvement under its use, but not, I must confess, very rapid, although more so, I think, than with simple medicinal treatment alone. In opium habit and chronic alcoholism, it usually completely subdues the inordinate appetite while in the bath, and its effects usually continue in lessening degree for several hours afterward. It recommends itself as a valuable aid to the means usually employed in the treatment of these affections. I have not observed the hypnotic effect from the faradic current, to any extent, which some writers have dwelt upon, and which is so marked a characteristic of the galvanic current.

In nervous disorders the range of the application of the electro-thermal bath is also large. I have observed beneficial effects in local anæsthesia, in nearly all the pareses, whether from central or peripheral lesions, or from lead, arsenical or malarial poisoning. An interesting case of arsenical paralysis of the legs below the knees is now under treatment. In neurasthenia with its myriad attendant symptoms, in disturbance of sensation, in hysteria, in its numerous manifestations, in melancholia, and in almost all forms of neuralgia, it offers a useful and often speedily curative remedy. The list might be much lengthened, but the number presented will suffice as an illustration of its field of usefulness, and are presented from cases actually treated.

In many nervous diseases I greatly prefer the galvanic current, from its much greater sedative effects. Thus, in locomotor ataxia, epilepsy, insomnia, cephalalgia, chorea, herpes, most inflammatory conditions, tinnitus aurium, hyperæsthesia, etc., it has seemed to me most advantageously employed.

In closing, I would remark that the electrical baths which I have seen figured or described in books have seemed "exceedingly crude," as Beard and Rockwell have denominated them. This, however, is not a proper time or place to discuss them differentially. The few facts which I have presented from my experience, in so rough an outline, I have tried to give in the interests of medical progress, not unmindful of the fact that there exists a prejudice in the minds of many against both electricity and everything balneological.

PNEUMONIA TREATED BY VENESECTION.

BY JOSEPH STUBBS, M.D.,
Of London Grove, Pa.

Perhaps no one who claims to be read up in the periodical literature of the day has failed to read the interesting articles of Dr. Hiram Corson, on "Blood-letting in Acute Inflammatory Diseases; more Especially in Pneumonia."—MEDICAL AND SURGICAL REPORTER, Vol. 44, Nos. 3, 7, 10, and 16, and Vol. 46, No. 14. The strong testimony and practical bearing of those papers, coming from a man of long experience and close observation, elicited a deep interest in the profession. The same views were ably sustained by Professor S. D. Gross, and Dr. E. Michener, who added the weight of their extended experience in favor of reviewing the "lost art" of blood-letting in inflammatory diseases.—*Country Practitioner, Feb., March, and April*, 1881.

Strongly impressed with the testimony of a trio of such men, drawn from their own personal observation and experience, in favor of bleeding as the first, indeed, as *the* remedy in pneumonia, I had resolved to test it for myself whenever an opportunity should present. I did not wait long, until Dr. Michener, one of the trio named, himself became my patient. I was called from my bed at an early hour on the morning of Second Month 26th, 1881, to visit him, and promptly responded to the call. He gave me the following history:—

"I am now in my eighty-seventh year. Five

days ago I fell on the ice and sustained a transverse fracture of the humerus, near its upper extremity. There was no displacement of the fragments, and it appeared to be doing well. There was no unusual shock or irritation. Last evening I was quite chilly, without any sensible cause, had tenderness and aching in the submaxillary glands, more marked in the tonsils. On retiring, after a short sleep, I awoke; the signs of the evening had passed away, and were replaced by others of a graver character. I now had well pronounced fever, accompanied with weight and a burning sensation in the right thorax. The breathing was oppressed and hurried, more so when lying down. These symptoms were persistently aggravated during the remainder of the night."

I found him with a dry, hot skin, the pulse frequent and feeble, or rather oppressed. There was dyspnœa, the breathing short and hurried, with oppression and some pain through the right mammary region, increased by coughing, lying down, or attempting to draw a full inspiration. The percussion sounds were not much changed. The respiratory sounds were feeble and harsh, with crepitant ronchus, quite distinct, over the right lung. My diagnosis was pneumonia, to which conclusion the Doctor had already arrived.

Although I had just read the Doctor's article in the *Practitioner*, in which he so strongly recommends blood-letting in this disease, I said to him: "Doctor, notwithstanding your views in reference to blood-letting, you would not advise it here, on account of your advanced age. You are too old to be bled." The prompt reply was: "That must be tried. I do not know that age should make any difference. If I have but a little blood in store, a proportionate quantity should afford relief, especially now, while the disease is still in the congestive stage. If thee does not wish to use the lancet, I shall be obliged to use it myself."

I, of course, assented. He then handed me his lancet, with explicit directions how to proceed.

"I prefer to sit up. A less quantity of blood will suffice. When the vein is opened, then apply the ear to the chest and the finger to the pulse, and carefully watch the results, without much attention to what may be in the bowl. Remember, that our purpose is to relieve the lung of its burden. As that is accomplished, the blood will again resume its course. The pulse will become slower, fuller and softer. The skin will lose its unnatural heat, perhaps become moist. The lung sounds will become normal, and I shall be able to draw a full inspiration. When these ends are reached, it will be time to stop the blood. Probably not until then."

The Doctor's programme was strictly observed and the changes distinctly noticed. When he drew the first free breath, the blood was immediately stopped. On recurring to the vessel, it was found to contain ℥ xv of blood.

It is needless to extend the report of this case further. Indeed, I had no case left to report. The disease was suddenly and completely aborted, and required no further attention. My only prescription, a mild expectorant, was never used. It is proper to add that the lung has not been left crippled, as too often happens under adverse modes of treatment. If bleeding will do this for a *spare man, of the Doctor's age*, what ought we to expect from its use in young and plethoric subjects? I am now convinced that the danger from blood-letting has been as much exaggerated as its use has been neglected. If so, it is not unreasonable to suppose that many valuable lives have been allowed to perish for the want of its timely and judicious employment.

Remarks by the Patient.—Even when blood-letting was in the ascendant, many physicians hesitated to use the lancet in the later periods of life, lest the recuperative powers should be too feeble to restore the waste of the vital fluid. While proper caution is always commendable, there is no proof that this hesitancy is well founded. It is obvious that the grade of morbid action, and the quantity of blood required to subdue it, are dependent on the same conditions. Many months have elapsed since the occurrence, and there is no sensible impairment of my physical or mental condition which can be attributed to the loss of blood on that occasion.

Whatever may be the opinion or the prejudice of the reader in relation to this case, it presents three striking features which can hardly be questioned:—

A rapid and extensive congestion of the lung.

A high grade of morbid action tending to destruction of important vital tissue, and

A sudden and complete arrest of the disease by blood-letting alone.

For all practical purposes pneumonia is an acute inflammation of the lung; nothing more, nothing less. It represents three stages: the congestive, the inflammatory and the destructive stage. Their peculiar organism and complex functions determine the character and the fatal tendency of the disease, and demand for it that prompt and immediate relief which the lancet is

so admirably adapted to afford, as shown in my case. We unhesitatingly place it on record as a *paragon* of therapeutic practice. It is not new. There have been many such cases, and there will be many more. Physicians will not always ignore the facts of their own experience. And the people will learn to prefer prompt and easy relief from the lancet, to the feeding, stimulating process which so often fails in the end.

REPORT OF TYPHOID CASES.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

The following history of a bit of experience in a circumscribed endemic of typhoid fever may not be without interest, although it is in some measure a repetition of old statements, made and reiterated many times by many writers:—

On the 15th of Dec., 1881, I was called to see S. A., aged 14, one of a family composed of the father, three sisters and one brother. One sister was aged 17, one 12, one 6, and the brother 8. The father was a puddler in the iron mill of this city. The place of residence was a frame dwelling, with basement kitchen, and cellar, two rooms on the ground floor, and bed-rooms on the second floor. It was a neat double cottage, seemingly well arranged for tenant use at a moderate rental. Unfortunately, the basement story was so low that when there was any quite high swell in the Ohio river (as there is nearly every year, often several times in a year), the water rises over the floor, and drives the occupants to the story above. The water supply was derived from a cemented cistern near the basement kitchen door, the top of which was lower than the basement floor. The back-water would, therefore, sometimes enter and fill the cistern before rising enough to enter the basement of the dwelling. It is to this water supply in the cistern and the character of the back-water that we wish to call special attention. This city, Aurora, is situated on the north bank of the Ohio river, and is divided by Hogan creek into two parts. There is much low ground within the city limits, that is almost yearly overflowed by back-water. The residence in question was located on this low ground. We desire you to note that on the right bank of Hogan creek, about two hundred yards from this dwelling, is a large distillery, with accompanying hog and cattle pens, where many hundreds of these animals are fed every year. The debris from these pens runs down into the creek, and when the creek is low it accumulates in vast quantities, yielding no very roseate odor, but is, in fact, a nauseous insult to every man's olfactory that comes near it in hot weather. Besides the filth that runs into the creek, much accumulates under and about the pens. Over this the water rises at times and soaks away much of its power for mischief. Now, it so happens, from the lay of the banks of this creek, that the first place where the back-water breaks over its boundaries is quite opposite the residence in question, and about one hundred yards from where it is located. There is no perceptible current in the water when it backs toward this house, yet any one can at once see that water rising over this mass of filth can but be impure in a marked degree; and this is the kind of water that has more than once filled the cistern at the residence before named. Still further, there stands about forty feet from the cistern a double privy, which the back-water enters before reaching the cistern. Its contents, of course, go into the water, and certainly take nothing of purity and healthfulness away from the already muddy, filthy flood. This water, whether foul or not, finally rises above and pours into the mouth of the cistern, near the kitchen door. No one need be told of the heavy sediment always left by back-water, where it stands any considerable time. There must, therefore, also, of necessity, be a sediment left in the bottom of the cistern in question. It could not be otherwise. Now the landlord always has the water pumped out of the cistern after the back-water goes down. This is right. But he does not always have it scrubbed and well washed out, in order to remove all the filthy sediment that is, of course, left behind. This is the situation and environment, in a sanitary sense, in which I found the family in question. Whether the water was the cause of, or carried in solution, the germ that gave rise to typhoid fever I do not know, but I do know that I could find no other cause in the house or surroundings, nor in the diet of the family. I will further say that the house was kept neat and clean, so that nothing in the house could be laid to the charge of the housekeeper, in the way of want of cleanliness.

But while we have called special attention to the qualities of the back-water as destroying the healthful qualities of the drinking water in the cistern by overflowing its top, we wish also to say that, according to the best judgment we could form, the cistern also leaked and permitted this sweet flavored (?) surface water to flow into its already impure contents. A day or two after it had been pumped dry as the pump in it would permit, there was no trouble in again pumping

water out of it, though none had been permitted to run into it from the roof.

Another fact worthy of note, as a disease producing factor, is the fact that this same back-water left its unwholesome sediment all over the flat bottom land round about this and other dwellings adjacent to it. This same water also, rising over the basement floor and into the cellar, would have no wholesome effect to leave after its recession.

Moreover, a whole family living in the next house to the one in question, and somewhat similarly situated as to water supply, were twice poisoned by the water in their cistern. At least, this was the cause given the attending physician at the times of their illness. Five other families round about this habitation have not had typhoid fever nor malignant diseases, recently, as far as I know; but during the hot dry months of last summer and autumn I treated a number of cases of most obstinate diarrhœa in children, in the same neighborhood, and some in this same house. On the east side of this flat I treated also some most villainous attacks of dysentery, that refused to yield until the patients were removed to a more wholesome locality. And during the month of December, 1881, I treated in the same house, last above named, two cases of diarrhœa, with malarial complications, on which I could make little impression while living in that place. On removal, the disease disappeared in a little time. In this instance also a surface water cistern—for it was practically such—seemed to be the source of the diseases afflicting the inmates.

Returning now to the family first named, the boy, aged 14, was attacked with a violent cold, and reported to me on December 15th, 1881. There was considerable pulmonary congestion, high temperature, and well marked cerebral disturbance, within the next forty-eight hours. These measurably subsided, so that he seemed quite relieved, but still had a white, tremulous tongue, high pulse and temperature. By the fourth day from first reporting to me at my office there could be no doubt that we had to deal with a severe attack of typhoid, with some pulmonary disease still remaining, and cerebral symptoms for a time uppermost. But the whole trouble settled into a regular but fierce attack of pure typhoid, which, but for the greatest care, must quite surely have ended fatally. On the 26th of December, thirteen days after the first case was attacked, the oldest daughter, aged 18, began to manifest prodromic symptoms of the same form of fever, and January 1st, 1882, took to her bed, where she remained for four weeks, the fever leaving her on the eighteenth day, prostrate, anæmic, thin and weak. The fever in the lad before named continued to the twenty-first day, when it subsided.

On Jan. 10th, 1882, the youngest boy, aged 8, manifested clearly the presence of the fever, though he played as usual, or went on short errands and chores for the family. Still, for two weeks, I did not find his temperature below 101° in the morning and 103° in the evening, and for four days it ran up to 103° in the morning and 105° in the evening. He became very thin and pale, had some diarrhœa, pulse rapid and feeble, but he all the time had a good appetite, digested his food well, slept well, and never took to his bed. Often complained of being tired. This was as clear a case of "walking typhoid" as I have ever seen, and without the thermometer might have escaped without a correct diagnosis until brought down. He was treated as regularly as those who were prostrated and in bed, only less restricted in his movements and diet.

On the 8th of Jan., the second daughter, aged 12, began to complain and show quite a rise in temperature. On the 10th, took to her bed, to endure a more prolonged stretch of high temperature than either of the preceding cases. The onset of the second week gave a temperature of 103 in the morning and 105 in the evening. This soon changed to 104° morning, 105° evening, and, with the exception of a slight morning variation, and once running up to 105½° evening, it stood at this for ten days, without a break in its even range, then dropped to 102° and 101° morning, and 104°, 103, then 105° evening. For days life trembled as in the balance, before any break in temperature came that offered a ray of hope. The first case mentioned was also a most fierce attack. The general range of temperature averaged throughout was not much above that of the average cases of typhoid, but at one time the thermometer registered 106.5°, several times 105°, often 104°.

These cases were treated by the use of heroic doses of cinchonidia, or quinia, every evening, *i. e.*, grains x to xl, according to the ages and strength of the patients, also with the fever mixture commended by Bartholow, *i. e.* tinct. iodine and carbolic acid, by as nearly continued bathings as possible, cold drinks, *ad libitum*, and as the strength failed or the fever gave way, some form of alcoholic stimulant was given, and finally the free use of digitalis, as the weakness of the heart became manifested. Food was regularly given. In the first case, life seemed so near extinct at one time that the hypodermic use

of ammonia was resorted to, and also, by the same method, whisky and atropia. After rallying, stimulants alone were relied upon in connection with nourishment. In the last case atropia was often resorted to to rouse the circulatory and respiratory centres, also nux vomica. But the main line of treatment was pointed out above. Of course, nourishment was carefully attended to, and kept up with great care and precision throughout the whole course in each case. No fatal results occurred in any of these cases.

Typhoid fever was not epidemic in this locality. There had been cases here and there for more than a year, but not many of them, and few of them of the low, severe form. Therefore we believe that epidemic influence had nothing to do with the production of these cases. No case of typhoid fever had ever occurred in the house where this family resided, for it was quite a new house and its history is well in hand. Reasoning by exclusion we find no other cause than that of the water on the one hand and the malarious air from the adjacent flats covered with foul sediment from the back-water, coming, as it must, up the foul creek, and taking into solution the debris from the cattle and hog pens on its banks. A strong reason for suspecting the drinking water was the fact that while all the other families in that immediate vicinity were exposed to the same general causes, none of them were subjects of the disease except this one, this being the only family using water from this cistern. I know it is not easy to trace the source of the poison in these cases, and therefore do not claim to fix its origin with any certainty.

The points of interest in these cases are—

1st. The regular succession of them, one following the other at quite regular intervals as to time of attack.

2d. The very marked high temperature in two of them, and the long continued high fever in one.

3d. The case of "walking typhoid," with its high and regular course of typhoid temperature while still up, eating well, playing, running errands, etc.

4th. Perhaps I may note the great value of the hypodermic use of stimulants in the extreme condition in the first case.

—An English Slaughterman makes the statement that but few calves have perfectly healthy livers, "not one in ten," most of them containing larger or smaller collections of putrid "matter."

Hospital Reports.

PHILADELPHIA HOSPITAL.

A CLINICAL CONFERENCE BY JOHN M. KEATING, M.D.

Roported by W. A. Edwards, M.D., Assistant Pathologist to the Hospital.

The Scrofulous Diathesis.

Gentlemen:—We will to-day study scrofula, which may be defined as a diathesis, characterized by disorders of the nutritive process, whereby the tissues are permitted to undergo inflammation from trifling irritants; by hyperplasia of certain parts, more particularly the lymphatics, and especially the glands of that system.

The inflammation is more apt to be of a subacute character, and its products are prone to cheesy degeneration. It is a disease of infancy and childhood, as you can see by the number of its subjects in this ward, rarely presenting its first manifestations in adult life. Scrofula may be either *congenital* or *acquired:* in the former it is seen in children of scrofulous, aged or nearly related parents, or in tertiary syphilis, tuberculosis, etc., of the parents, more especially of the mother, or again, from prolonged lactation from other children, rapid child bearing, or feebleness of the mother.

In the latter, the acquired, it is developed after birth, from a predisposition brought about by cachectic parentage. Artificial feeding or insufficient nourishment may be set down as a frequent cause, as are cold, moist, badly ventilated, sunless abodes, little movement of the body, preceding severe sickness or exhausting diseases in the first months of life, as the eruptive fevers, measles, scarlatina, pertussis, etc.

It can be transmitted by inoculation, and, in fact, it has been stated by some well-known experimenters, that the inoculation of tubercle results in the development of scrofula, and more recent investigators have demonstrated that there is no essential histological distinction between tuberculosis and scrofulosis of the lymph glands.

This resemblance is further borne out by the frequently simultaneous occurrence of tuberculosis and scrofulosis, and from the fact that scrofulous children not infrequently become tuberculous. The scrofulous new formations resemble the tuberculous, not only in themselves, but in their metamorphosis, cheesy degeneration, or simple atrophy.

Scrofula is frequently torpid or latent, as it was in this little baby, requiring an irritant to develop the primary symptoms. In this case vaccination was followed by all the manifestations of scrofula. It is scarcely, then, well for us to state that scrofula is contagious; but, as we said above, direct inoculations may produce it in one predisposed.

As vaccination, when carelessly done, is the readiest means for this transmission, either by producing simple inflammation and thereby awakening into activity the scrofulous diathesis, or the direct transmission of the blood or inflammatory products from a scrofulous child to another untainted; hence, we should be on our guard.

Symptoms.—The diathesis usually develops or shows itself first upon the skin or mucous membranes, then the contiguous lymphatic glands, though at times periosteal lesions, or those of bones, may occur primarily.

If you will glance around the ward you will notice a number of children presenting scrofula in its various lights and stages.

This little one shows the various skin inflammations and eruptions of the disease, especially on the head and face, chiefly in the region of the nose, mouth, eyes and ears, mostly of an impetiginous or eczematous form; the latter is a very common eruption; it also illustrates well a scrofulous inflammation of the eyes, *i. e.*, phlyctenular keratitis. Conjunctivitis is usually seen in these scrofulous children.

Now if we turn to this patient we find the cervical lymphatics enlarged and well marked; this is of the character of a cellular hyperplasia, and sometimes we see the simultaneous formation of pus, or again, we may have the deposition of miliary tubercles.

These enlargements are of varying sizes; some are hardly visible, others the size of a pea or larger, and again others involve the whole gland. Cheesy degeneration is very prone to occur with suppurative inflammation around it, leaving ulceration and finally a permanent cicatrix, as we see in this woman's neck, the mother of our patient.

Otorrhœa and caries of the bones of the ear is an early and not infrequent manifestation of the diathesis, as these two little infants show us. A frequent symptom is inflammation of the bones and the joints—occasionally only of the periosteum, generally of the bone itself—which not infrequently terminates in caries or necrosis; this is most seen in the vertebræ or the small bones and joints of the extremities, especially the lower.

We occasionally see strumous dactylitis occurring in these children of a year or more, of whom we are unable to obtain any syphilitic history whatever. There is no peculiar anatomical characteristic of the individual affections of scrofulosis, nothing in the tumefaction of the glands, except their sluggishness; these non-inflammatory swellings are more like chronic œdematous infiltrations, occasionally more like œdematous connective tissue hypertrophies.

Characteristics of it, however, are the great ease of its appearance, in other words, the great vulnerability of the tissues, its sluggishness, its mostly persisting for years, its return without apparent cause, the ease with which the lymph glands take part and the length of time that suppuration of the latter outlasts the primary affections of the skin and mucous membranes.

The scrofulous diathesis may be exhibited in children whose features and forms are delicate, whose skin is transparent, and who are easily excited, with bright eyes and good intelligence, the so-called *erethistic* scrofulosis; or again, in those who are large and flabby, languid in movements, in whom an over production of fat is seen, especially in the nose and upper lip, the so-called *torpid* scrofulosis.

Scrofula and leucæmia are not identical, the first occurring usually in childhood, the second in manhood; the first being usually accompanied, in its advanced state, by diminished corpuscles and increased water, and only when in the state of inflammatory enlargement of the glands does it simulate the latter in having an increased number of white corpuscles.

The *prognosis* in the lower grades of the disease, with care, is good; in the more severe grades it not infrequently terminates in death; the latter result is generally brought about by tuberculous or scrofulous suppuration, or by miliary tuberculosis of internal organs, severe joint and bone suppuration, and, hence, marasmus, or again, by lardaceous degeneration of the various organs. We rarely see a scrofulous subject die through general anæmia.

The *treatment* should be prophylactic and curative; for the former we should avoid all those causes that I laid down as factors in acquired scrofulosis

We should see that our little patients who present this diathesis have plenty of warm clothing, fresh air and sunlight, occasional trips to the sea-side, with salt baths, etc. We should also see that their diet is carefully regulated and nutritious; an important article of the dietary is good, rich milk. The digestive organs should receive a large share of your attention. See that they are in perfect condition and maintain them so, if possible. You should order a proper amount of physical exercise, with little mental labor.

For the *curative* treatment our sheet-anchor is cod-liver oil, iron and iodine; the two latter may be combined as the syrup of the iodide of iron, or you may use the tr. ferri chlor. An important reinforcement to the cod-liver oil is the lacto-phosphate of lime. Tonics should not be given until you have corrected all evidences of marked intestinal derangement. Alcoholic stimulants must be used in moderation. I prefer the light wines or malt liquors to the stronger stimulants. Local ailments should be especially attended to. For glandular swelling you may use iodide of pot. ʒj, ung. stramon ℥j, or the ointment of the red iodide of mercury.

For the conjunctivitis I use atropia sulph. gr. ij–ʒj; when phlyctenulæ occur you may dust with calomel.

The various skin eruptions, bone affections, etc., attendant upon this diathesis, need but little modification of your general plan of treatment.

Rœtheln and Morbilli.

We have before us the study of an eruptive disease, in fact, *two* of them, and I wish to call your attention to their distinguishing features.

These children are Swedes; they have just come from shipboard, where they have been exposed to the contagion of an exanthem, and also to the depressing influence attending a sojourn in the steerage. There have been a number admitted to this house, some with the eruption already at its height, others presenting simply the prodromic symptoms to be shortly followed by the eruption as you see it.

Let us study this little sturdy fellow. You will notice that he is covered with the eruption, and that it presents these characteristics:—

Upon the forehead it is almost uniform, of a

somewhat salmon color, not raised above the surface, but readily disappearing upon pressure; as it approaches the temples, islands of surface appear unaffected; the shore lines, if I may so term them, have a distinct crescentic character; you will also note that as the eruption spreads over the face it gives a decided blush of uniform redness to the cheek, of a rather darker color, bordering on a shining, crimson appearance.

Again it extends down upon the neck, with a more punctiform appearance, but still not raised to any very appreciable extent, in fact, looking more as if the color had been washed in by an artist. Let me call your attention, in passing, as the child turns its head from you, to the fact that you see distinctly the outline of the facial bones; in other words there is little or no œdema of the face.

I also call your attention to the fact that the eyelids are not swollen, there is but slight conjunctival redness, in some cases none at all, as is the case with intolerance to light.

The eruption in the soft and more delicate parts, as the chest, axillary region, inner forearm, the groin, and the site of the outer tibial muscles, bears a close relationship to that of the face.

In this it is said to resemble scarlet fever, though I must confess I do not see the similarity. Upon the coarse skin you have a coarse eruption, distinctly papular, scarcely raised, and attempting to form large crescents, "rising moon"-like in appearance. Here we note that the eruption is darker in color, bordering upon a purple.

The throat is red, of uniform redness, not punctiform, and the tongue, like scarlet fever, is *ermine*-like.

The history given us is one of five days of prodromic symptoms and malaise. There have been sneezing and coryza, with a sore throat; a febrile tendency and a clear, ringing cough. There has also been, and there is at present, distinct enlargement of the cervical and post-cervical lymphatic glands.

In adults these give rise to stiffness of the neck and radiating pain down the back and upward toward the occiput. In this case there is but slight bronchial catarrh, even though the eruption is at its height, and the cough is paroxysmal, as you notice, and still croupy.

This eruption will last four days or less, and rapidly disappear, with no desquamation of the cuticle, but some stains will remain, which resemble the petechiæ of typhus fever, and last for a few days. This boy's temperature is now about 103°, but it will rapidly fall; the rapidity of cure is remarkable.

There have been some cases in this ward which have developed a severe bronchitis, and yesterday an infant died of complicating croupous pneumonia; this is a rare termination, and attributable to the exposure on shipboard, exhaustion from the sea voyage and close confinement, more than to the disease itself.

Now, what are the principal points to be noted? First, the character of the eruption; the absence of swelling of the subcutaneous tissue, especially of the face; the absence of marked conjunctivitis; the decided enlargement and tenderness of the post-cervical glands. I may remark that I deem the laryngeal cough, which remains *croupy*, as to be specially noted, and the marked absence of severe bronchitis with a loose cough shortly after the appearance of the eruption, which in measles shows that the mucous membrane has been affected as well as the cutaneous surfaces. The sudden cessation of the symptoms, disappearance of the rash and the absence of scaling of the cuticle.

Let us now study another epidemic which we have in the children's asylum.

This little girl, whom I show you, is two and a half years old; has been an inmate of the house for some time.

Several days ago she began to ail, suffering from a "severe cold in the head," with conjunctival redness; an examination of her throat showed an inflammatory action, with a decided punctiform or papular condition of the mucous membrane of the anterior half arches and of the uvula. There was also some enlargement of the tonsils and tenderness of the glands, also of the lymphatics at the angle of the jaws.

The next day there was a decided rise in temperature, with an aggravation of the symptoms, decided photophobia and swelling of the eyelids.

An indistinct eruption appeared on the temples, very pink in appearance and crescentic in form, like minute pin points in small crescents.

This faded away, to develop the next day with greater distinctness. The following morning she had a high temperature, 104°, the face was swollen, the eyes fiery red and almost closed; a profuse eruption was now on the cutaneous surface resembling that I have just described. There were no blotches, no even redness, but throughout it was papular, raised above its surface, and evenly crescentic. At this time the cough became frequent and the secretions of mucus from the laryngeal and bronchial membrane, like that of the conjunctiva and nares, was profuse.

It was a loose cough. The chest and arms resembled the back in appearance, but the back and nates, part of the thighs and buttocks, showed a coarser eruption, in regular ridges, decidedly papular. The bowels were also slightly distended, and there was at times nausea.

To-day you see the eruption at its height, and I call your attention to its color as well as to its other qualities that I have described. The color is now of a flesh-pink, though darker on the thighs and buttocks, being there more of a salmon color.

Now in this case you have evidences of marked bronchitis; you hear coarse and fine mucous râles; but I am happy to say you can detect at present no evidences of catarrhal pneumonia. It is needless to say that here we have a type of *measles*, and the marked contrast of these cases which I have shown you cannot be questioned.

We see our little patient to-day at the "cross-roads" of the disease. It may result in a gradual amelioration of the symptoms, with gradually lessening fever, a deeper-colored eruption, the gradual fading and subsidence of the œdema, and finally the desquamation of the cuticle in branny scales; or again, she may develop symptoms more typhoid in character, symptoms of malignancy, with croupous exudation in the throat, diphtheritic in appearance,

and, in fact, finally, death from blood-poisoning, with, in all probability, convulsions; or again, catarrhal pneumonia may develop and carry off our little patient in a few days.

I have shown you lately several cases of these forms, and you have studied their post-mortem appearances. You have, then, to tabulate the peculiarity of the eruptions; first their *seat* of appearance, its colors and its distinct papular (elevated) crescentic appearance; also the marked coryza, with swollen eyelids, and the conjunctivitis, upon the appearance of the extensive bronchitis with much secretion (a soft cough.) You have but little swelling of the lymphatic glands. In addition, you have had the punctiform sore throat, the prolonged stage of eruption, with the gradual fading and the marked desquamation of the cuticle. In addition to these you have the *complications* which are so numerous in measles and so rare in rötheln.

What is the treatment?

You have already noticed that I have laid great stress on the *complications* in discussing the future of these cases, and I may further add, that apart from the usual treatment of a febrile attack, the concomitant complications alone need attention; first to avert them, and secondly, to modify their severity. Rötheln, apart from these, which, as a rule, are not frequent, except in children previously exposed, is a mild disease, requiring only hygienic measures in its treatment; but *measles* in children who are strumous is an exceedingly fatal disease, especially in hospital and alley practice.

First you have the tendency of bronchial catarrh to extend and develop catarrhal pneumonia, and secondly, you have typhoid and diptheritic forms to contend with.

For the former you will find the counter irritation of warmth and moisture most important, with the administration of small doses of quinia during the day and bromide of potass., ammonia, or Dover's powder at night; the latter is especially efficacious.

You can give a fever mixture of citrate of potass., with the citrate of ammonia, and milk or chicken broth, at regular intervals.

I prefer the use of *hops* quilted in between layers of flannel and steeped in hot water, instead of poultices, covering it well with oiled silk, to prevent evaporation.

For the latter the most energetic tonic and stimulant treatment is required early in the attack, carbonate of ammonia, quinia, the vegetable acids, and alcohol, in large doses. The frequent use of hot baths, 98°, should any cerebral symptoms develop; a careful regulation of the nourishment, so that the child will take a suitable quantity at short intervals and in small amounts.

I am a firm believer in calomel in small and repeated doses, and alcohol in large amounts, when *diphtheritic* exudation or symptoms of malignancy show themselves.

I have also confidence in the external application of vaseline, which gives softness to the skin, aids in the reduction of temperature, and frequently gives a quiet night instead of the usual restlessness that accompanies cutaneous irritation, with a hot, dry skin.

Medical Societies.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, June 1st, 1882. The President, Dr. Edward L. Duer, in the chair.

Dr. B. F. Baer related the history of a case of **Punctured Wound of the Pregnant Uterus; Partial Escape of the Fœtus into the Abdominal Cavity; Retention of the Fœtus Five Years.**

October 4th, 1881, Catherine Curley presented herself at the Dispensary for the Diseases of Women, at the Hospital of the University of Pennsylvania, and gave a history which is essentially embodied in the following letter, addressed to Dr. Goodell from her physician, Dr. John Keogh, of Killaloe, Ireland. (This letter was received after the patient had been treated as described in this paper, but as it gives an intelligent description of the case at the time of the accident, it was thought proper to insert it here.)

"Catherine Curley, who was within a week of her confinement, was standing upon a chair, the back of which, with the exception of two uprights, had been broken away. She was at the time collecting brambles, and in stretching for one over reached herself and fell, and in the act of falling her right side came in contact with one of the uprights. A short time after she was found lying on the ground in a fainting condition, from which position she was removed to bed and I was summoned to see her. On examination I found a contused wound on the lower and right side of the abdomen, and in addition came to the conclusion that the womb was ruptured and that the fœtus had escaped into the cavity of the abdomen. There was intense tenderness and great distention. I immediately decided on giving her at once calomel and opium, the latter in large doses. After the third day I stopped the calomel and continued the opium. The pain and tenderness almost disappeared after a week, and I may say, from that period until she left here she never had a bad symptom.

"Several medical men in this county expressed doubts about the correctness of my diagnosis, but I at once convinced them by presenting the woman for examination at Limerick, a city near here, where many men of eminence and long experience saw her."

Dr. Keogh does not say that the prong of the chair was driven into the abdomen. It appears, however, that such was the fact.

It would seem incredible that the pain and tenderness should have almost disappeared in a week, and that she should not have had a bad symptom until five years had elapsed. She, however, recovered from the accident, and, strange to say, menstruated three months afterward, and has been doing so regularly ever since. To make matters worse, if possible, her husband, who was in the last stage of phthisis at the time, died within a week, and she was left, without means, to support a family of five small children. This she did through four years, by manual labor. Three years ago she came to this country and settled in Salem, N. J., where, last summer, she was under the care of Dr. E. C.

Sharp, at which time she passed through an attack of what seemed to be typho-malarial fever, in consequence of which she became somewhat emaciated and her muscles became relaxed and toneless. This allowed a hernial protrusion through the puncture in the abdominal wall; for this she sought relief, hoping to procure a suitable truss. I only obtained the history of the accident by direct questions in regard to the cause of the hernia, that being regarded by the patient as the greater difficulty and the one requiring treatment. Physical examination, with the patient in the dorsal position, revealed, by palpation of the abdomen, a circumscribed mass in the hypogastric region, extending as high up as the umbilicus and a little further to the left than to the right of the median line. It was about the size of the pregnant uterus at the sixth month, rather flaccid, and pressure on it gave to the hand the sensation of loose bones moving over each other, a kind of crepitus. On the right side of the abdomen, a little below the umbilicus, there was a round perforation about the size of a silver dollar, which seemed to penetrate everything except the skin. Through this break in the abdominal wall the intestines protruded when she was upon her feet, constituting the ventral hernia, for which she desired the truss. Examination *per vaginam* gave the following result: The cervix-uteri was small, hard, rather low down and pointing forward, in the direction of the vaginal orifice. The os externum was small and circular, but it was patulous, and flowing from it was a peculiar yellowish fluid, slightly fetid. The finger carried posterior to the cervix discovered the body of the uterus enlarged and apparently expanded around the loose bones referred to above. Now, carrying the finger to the anterior surface of the cervix, the same bulging forward was discovered and the same continuation of the anterior wall of the cervix into what appeared to be the anterior wall of the developed uterus. Bimanual examination seemed to confirm the opinion already forming, that the fetal remains were still, in part at least, within the uterine cavity. On the right side of the uterus, near the fundus, there was a prominence; otherwise the walls were smooth. I now passed the sound through the os and into the uterine cavity, when it came upon a mass of bones, which seemed to be loosely held together by disintegrating soft tissues. The instrument was readily passed to a depth of six inches, and could be moved about with the greatest ease and without the least sensation of pain to the patient; its withdrawal was not followed by any discharge. There was nothing about the case which led me to suspect even that the sound had not really passed into the uterine cavity, but instead, that it might have passed through an opening in the uterine wall near the cervix, into an extra-uterine cyst containing the fetal remains. It may, however, have passed through the opening which was afterward found near the fundus, but not before meeting with that portion of the remains surrounded by the expanded but flaccid uterine walls.

I was, naturally, I think, rather inclined to disbelieve the history of rupture of the uterus, from such an accident, to a degree sufficient to allow the child to escape into the abdominal cavity, since the subject was alive and before me. I sought to explain the unusual condition by one of the following hypotheses, viz.: first, that the pregnancy had been an extra-uterine one, and probably of the interstitial variety; that the accident resulted in the death of the child merely, and not in the rupture of the gestation sac. That it had then remained a harmless body until the patient had become reduced by the fever noted above, when it began to disintegrate, from decomposition, and be driven off per vaginam, after first ulcerating its way through the uterine wall into the cavity of the uterus; but this could not have been so, and the physical condition set down as the result of my examination exist. Second, that it was one of those very rare cases of so-called missed labor, in which, for some reason, shock of an accident, for instance, by which the nervous system is so depressed that there is not power enough to cause uterine contraction, the product is retained indefinitely within the cavity of the uterus. Third (and considered the correct explanation), that the uterus was really ruptured, but that a portion of the child escaped through the rent, thus preventing by pressure a loss of blood which would otherwise have probably resulted in the death of the patient, and that the portion which projected through the rupture became encysted, thus forming a cavity continuous with the uterine cavity, the whole mass remaining harmless until, through intercurrence of an exhausting disease, decomposition set in and it began to poison the patient. It is not necessary to offer an explanation, if the latter hypothesis be correct, why the uterus did not contract and expel its contents; because it is well known that in the event of rupture occurring during labor the pains immediately cease. But in any event expulsion could not have been accomplished here with the child held fast in the rent. Then, I think, the fact that the patient came so readily out of the collapse and recovered so quickly, and that the child lived so long (it is said to have lived three days), prove pretty conclusively that there was no great blood loss, and that the child did not escape entirely from the cavity of the uterus. The child dies very soon after it is expelled into the abdominal cavity, for two reasons, viz.: maternal hemorrhage, and interference with the function of the placenta and cord. Hemorrhage did not occur, if my theory is correct, for the reason stated above, and the functions of the placenta were not interfered with at once, because it was not separated from the uterine wall suddenly, nor compressed, as would have been the case had the uterus been empty and contracted.

My advice to the patient was that she submit to an operation for the removal of the decomposing mass, as I considered that she was suffering from slow septic absorption. The operation I suggested was dilatation of the os uteri and removal of the dead product *per vias naturales*. This I looked upon as the most feasible operation, for the reason that it seemed to be of such easy access through that channel, and therefore the one which would be attended with the least amount of danger. Removal by

laparotomy would have been most hazardous, since it would have been necessary to open the cyst and therefore the old rupture of the uterus. There would have been a fistulous opening in the uterine wall, which would have been closed with difficulty if at all. Moreover, the sac would very likely have ruptured, thus precipitating the contents into the peritoneal cavity. This, of course, would have been a grave complication, as the decomposing material would have been removed with difficulty and danger. Against removal through the os uteri was the possibility, if not probability, of rupture of the sac containing that portion of the fœtus outside the uterus, and expulsion of the contents into the abdominal cavity. This might have necessitated laparotomy, for the cleansing of the peritoneal cavity.

The patient, however, refused at that time to have the operation performed, and returned to her home.

December 16th, 1881, she again presented herself at the Dispensary, and exhibited undoubted evidence of septic absorption, in rapid pulse, evening rise of temperature and night sweats. Examination now showed the mass to be much lower in the hypogastrium, and apparently smaller than at the previous examination. The cervix was, however, of the same length and still hard, with no tendency toward dilatation of the os. The sound revealed the dead product to be nearer the os, and, altogether, this examination served to confirm my former opinion, that the product was largely contained within the uterine cavity, and that it could be removed through the os and vagina. This opinion was strengthened by the fact that there had been evident contraction of the walls surrounding the mass. She still refused to submit to the operation, and returned to her home. Her health continued to depreciate, and she was glad, on January 3d, 1882, to enter the gynecological ward of the Hospital of the University, in charge of Dr. Goodell.

After careful examination, Dr. Goodell confirmed, in the main, the opinion expressed above as to diagnosis and treatment, and two days later introduced into the os uteri one sponge and four laminaria tents. Next day the patient was anesthetized and the tents removed, when an effort was made to remove the fœtus. A fenestrated polypus forceps was passed into the cavity and made to grasp the contents; this was readily done, but the removal was not so easily accomplished, for when traction was made it was found that the fœtus was held firmly somewhere, and that it was so disintegrated that only the portion within the grasp of the forceps could be withdrawn with the instrument. This was repeated a number of times, each withdrawal of the forceps bringing away a bone or some broken down soft tissue. A discharge of about a pint of very fetid, thin fluid took place at this stage of the operation. The os was now becoming so small, from contraction of the cervix, that the forceps could scarcely be made to pass, and an effort was made to secure further dilatation by the use of Molesworth's dilator. But it would not work, because it was out of order, from long disuse. The only thing left to do was, either to introduce another set of tents and wait until they had dilated the cervix sufficiently, or incise the neck to the vaginal junction. The latter was done. The danger of septic absorption from such a proceeding was fully considered, but it was decided that to introduce another set of tents, let the patient come out of ether, and wait for their slow dilatation, would be the greater evil. Before and after the incision the parts were thoroughly disinfected by injections of a permanganate of potash solution. The same polypus forceps were now more readily introduced into the cavity and the mass broken up. This was followed by a profuse, thin, bloody, purulent discharge, of the most fetid character. An injection of the permanganate solution was now made, into the cavity of the uterus, until it returned unchanged, when another effort was made to remove the contents. After working for more than half an hour only a part of the product was withdrawn. At this stage of the operation considerable hemorrhage occurred, and this was increased with each endeavor to dislodge the mass from its nidus. For this reason, and because the patient was becoming weak (she had now been under ether one and a-half hours), it was thought prudent to discontinue further efforts for the present, and to depend upon antiseptic injections and contraction of the uterus to remove the remainder; or at least, to allow the patient to recover from this desperate condition, and gain strength to stand a second effort, after the mass had undergone further disintegration. There was, also, a fear of rupturing the cyst containing that portion outside of the uterine cavity, by further efforts.

The patient came out of the anesthesia slowly and in a state bordering on collapse, in which condition she remained for nearly twenty-four hours, when she gradually reacted. During the next four days there was a very fetid fluid discharged from the cavity of the uterus, together with some debris from the decomposing mass. The patient had to be removed from the ward, on account of the odor. The treatment was supporting, with very frequent irrigation of the vagina and uterine cavity with antiseptic solutions.

On the fifth day after the first operation, the patient evidently suffering from septicæmia, and there being no marked effort on the part of the uterus to throw off the remains, she was again etherized and another attempt was made to remove them. It was found that time had somewhat disintegrated the contents, and that, therefore, removal would be more easily effected. Bone after bone, and occasionally a piece of soft tissue, were withdrawn, until, at the end of about an hour, the cavity was almost entirely, emptied. I say almost entirely, because it seemed impossible to to get every small bone away, and for several weeks afterward an occasional bone would be thrown off per vaginam. The cavity was thoroughly washed out with the disinfecting solution and an examination made, to discover the seat and extent of the rupture.

The cavity of the uterus was large and rough, and in the right side of its body there was dis covered an opening, through which two fingers could be readily passed into a cavity beyond.

The recovery of the patient was slow; indeed, her life was despaired of for weeks, during which

time she suffered from numerous pyæmic abscesses. One of the abscesses was post-ocular, and resulted in the loss of the eye. She finally left the hospital, restored to health.

Removal of a Mammary Tumor and of Enlarged Axillary Glands—Primary Union.

Dr. W. H. Parrish exhibited the specimens and the following history: The patient from whom the specimens presented were removed is a lady of very slight stature, sixty-two years of age, and the mother of several children. There is no history of cancer in her family.

About twenty-five years ago she noticed a hard lump in the axilla, about the size of a partridge egg, painless, though tender on pressure. It was first noticed during a period of lactation; subsequently she was again confined and passed through the usual time of lactation, with a slight increase only in the size of the axillary tumor. For about twelve years after the first appearance of the axillary tumor she never noticed a lump in the breast. About twelve years ago, however, she, for the first time, recognized the presence of a mammary mass, then about the size of a partridge egg. This was about the menopause; at that time she lost in flesh, though her general health remained good.

The mammary tumor increased in size very gradually; continued free from pain, except when something would press unduly against it. About twelve months ago she thought the tumor had begun to increase in size a little more rapidly, and occasionally gave a sensation of soreness. This change in the tumor was ascribed by the patient to carrying in her arms a grandchild.

At the time of the operation the tumor in the breast was about the size of a small lemon, very hard and somewhat nodular, and was at the upper and outer border of the gland. It was perfectly movable over the pectoral muscle, and presented a distinct elevation above the general skin surface. The skin was not entirely movable over the mass, but was not hardened or otherwise altered in character. There was no nodular involvement of the integument. The superficial veins were not enlarged. The nipple was not retracted, seemed entirely normal, and no fluid could be pressed out of it.

There were three enlarged axillary glands, the largest very hard and a little larger than a partridge egg. There was no enlargement of the glands above the clavicle. Owing to the long duration of the masses, their entire mobility, the freedom of the skin from nodular infiltration, the absence of retraction of the nipple and of oozing from it, and also owing to the evident atrophy of the mammary gland, I concluded not to remove the entire breast, but only the tumor, including those of the axilla, and to remove also the integument overlying the mammary tumor. This I effected by an elliptical incision, and then extending the incision to the axilla, removed three enlarged lymphatic glands. It was not necessary to ligate any vessel; the oozing, which was not great, was stopped entirely by the use of hot water. The incision was about seven inches long. The edges were approximated by deep silk sutures. A few strips of rubber adhesive plaster were applied, and all covered with a layer of salicylated absorbent cotton, and the chest surrounded with a flannel binder. This entire dressing was allowed to remain until the fourth day, when, on removal of the cotton, it was seen that primary union had been secured throughout the entire incision. There was neither hardness nor swelling, to indicate inflammation. On the sixth day the sutures were removed, and on the tenth day the patient sat up. No medicine of any kind, not even an anodyne, was given during the entire treatment.

The long duration and small size, the normal appearance of the nipple, the freedom of the skin from pitting and nodular infiltration, and the mobility of the mammary tumor over both the pectoral muscle and on the mammary gland, have led me to hope that the growths are fibromata; but the enlargement of the axillary glands and their induration make me fear carcinoma.

Microscopical Examination by Dr. Henry Beates, Jr.

The specimen presented by Dr. Parrish is of unusual pathological interest. When it is remembered that the growth was present for nearly thirty years without undergoing a noticeable change, and only during the last year occasioned suffering and was accompanied with axillary involvement, the question of malignancy suggests itself, especially as the clinical history almost forces the diagnosis of adenoma. As many representative pathologists incline to the belief that typical mammary adenomata do not undergo carcinomatous degeneration, and many assume a conservative or non-committal position, this instance is of unusual interest and demands close study. Sections were made through the mass, and including the cutaneous surface. The skin, so far as the striatum corneum and rete-mucosum are concerned, is normal, but in the corium are areas of inflammatory changes. The radicles of several of the vascular papillæ are choked and surrounded by numerous embryonic cells and inflammatory corpuscles. The larger vessels are in a like manner involved, and the tissue in their immediate proximity infiltrated. The pons reticularis, where it becomes continuous with the subcutaneous connective tissue, is, in many places, the seat of proliferated connective tissue corpuscles.

The *glandular structure* shows beautifully its purely adenoid character. The acini, although filled with cells and almost hidden from view, are, with care, easily distinguished. The inter-acinous connective tissue is hyperplastic. The hyaline membrana propria is partially destroyed, and the acini filled with degenerated epithelial cells and cellular elements of increased size, possessing many nuclei. Some of the acini have the membrana propria entirely destroyed. The lymph spaces are occluded by cells, multinucleated and of increased size and irregular contour. The inter-acinous fibroid tissue presents incipient formation of stroma and aggregations of cells.

The axillary gland is completely altered in its structure, and instead of the mass of lymphoid cells, occupying large spaces bounded by the characteristic fibrous stroma, with its triangular basal form, we have typical carcinomatous structure. Fibroid stromata, joining at acute angles, forming numerous interspaces filled with irregu-

lar multinucleated cells, characterizes the degenerated gland as carcinomatous. This fact, in conjunction with the changes seen in the mammary gland, prove conclusively that the breast tumor was originally a typical adenoma, which, after thirty years, began to undergo malignant degeneration, and became a centre from which the axillary glands were infected. Dr. Robert P. Harris remarked that a point of great interest in the history of this tumor was the long period during which it remained dormant. He had had under observation a case in which a mammary tumor had remained perfectly dormant for seventeen years, during which two pregnancies occurred. After the second labor the tumor commenced to enlarge and become painful. An operation for its removal was performed some months later, when it had attained the size of a duck's egg. A chain of nine enlarged glands was removed with the tumor. The tumor recurred in the same breast and was followed by one in the other breast and numerous hard, nodular growths, over the entire body. Her death was due to this cause.

Two aunts of this patient, living in the South, had died of cancer. A sister had a tumor in the abdominal wall, which was allowed to attain the size of a door-knob without interference. At that time Dr. Agnew and other surgeons were opposed to the advisability of an operation. After a year the tumor commenced spontaneously to discharge a purulent matter. It was then successfully removed by Dr. Agnew, who pronounced it an encephaloid growth. It had made no attachments to the underlying vital tissues, and has shown no sign of returning. Two years have elapsed since the operation.

Editorial Department.

Periscope.

The Physics of Nerve-Stretching.

Dr. J. Symington, in the *British Medical Journal*, after detailing a number of experiments, gives the following conclusions:—

My experiments clearly show that the great sciatic nerve is able to withstand a considerable strain; but they also indicate the necessity for caution; more especially in the downward traction of the nerve. I have several times attempted to break this nerve in the dead subject, but have invariably failed, although the nerve was greatly stretched, and I sometimes heard suspicious crackling noises. The suggestion of Dr. John Cavafy, in the *Journal* (December 17th, 1881), that surgeons should come to some more definite idea of the amount of force employed, should certainly be acted upon. There are several points in connection with the operation of nerve-stretching, which have not apparently been sufficiently considered. If a nerve, such as the great sciatic, having an almost direct origin from the spinal cord, be pulled downward, an anatomical examination will show at once that almost the entire strain is borne by the dura mater. If the vertebral canal be opened from behind, so as to expose the spinal dura mater, and at the same time the great sciatic be stretched, a slight downward movement of the lower part of the dura mater is at once visible. By careful measurement, however, I find that it is not displaced more than an eighth of an inch. The dura mater possesses very little extensibility; and, further, the nerve-roots piercing it nearly opposite the intervertebral foramina, the stretching of the great sciatic rather tends to displace the dura mater laterally. Even a cursory examination will at once show that this cannot occur to any appreciable extent. If the dura mater be opened in the lumbar region, and the roots examined, it will be evident that the slight displacement produced by the stretching of the dura mater can have no appreciable effect in increasing their tension, and thus enabling them to act directly upon the spinal cord. The dura mater thus serves as a very efficient protector of the delicate spinal nerve-root; but, should it be torn, an extremely small force would suffice to detach them from the spinal cord. It therefore appears evident that stretching a nerve, such as the great sciatic, produces no direct mechanical action upon the spinal cord. Stretching a nerve less directly connected with the spinal cord, such as the median, is still less likely to affect directly the spinal cord; and, of course, there is no danger, in case of rupture, of its being detached from the cord. In the few experiments I have made upon this nerve, it always broke at the point where the force was applied.

The manner in which a beneficial effect is produced by the operation of nerve-stretching is very obscure. In some cases of sciatica, it may be due to the breaking up of adhesions, etc., pressing injuriously upon the nerve. In cases of central lesions, it probably acts upon the same general plan as other counter-irritants.

There is abundant clinical evidence to show, as one would expect, that the operation of nerve-stretching produces a powerful local action—not unfrequently being followed by temporary paralysis. Then, again, it produces a marked effect upon distant nerve centres, such as the respiratory and cardiac, as is shown in Langenbuch's cases. As a counter-irritant, it stimulates, not merely the nerve, but also its connecting trunk and branches.

In the operation, many surgeons attach special importance to the downward traction of the nerve—apparently believing that, by this means, they produce some direct mechanical action upon the spinal cord. This appears to me, as I have before stated, to be an erroneous idea; the nerve-fibres, as far up as the dura mater, being put

upon the stretch, but not the spinal nerve-roots beyond.

Dr. John Cavafy, in the *British Medical Journal* (December 17th, 1881, page 974), objects to the "nerve-stretcher" of M. Gillette, partly on the ground "that the extension must affect the peripheral and central portions of the nerve itself." If my view be correct, this is rather an advantage than otherwise, as a longer tract of nerve fibres is thus stimulated. Furthermore, by stretching a loop of the nerve, the force is divided between the peripheral and central ends—so that there is less liability to rupture. Traction upon the peripheral end of the nerve can be employed with more safety than upon the central end, the former being the stronger; and the nervous stimulation would probably be as great, if not greater.

Nitrite of Amyl in Hour-Glass Contraction of Uterus.

Dr. Fancourt Barnes records the following case in the *British Medical Journal*:—

I was called, at ten o'clock in the morning, on February 28th last, by one of the midwives of the Royal Maternity Charity, to a patient with retained placenta. On my arrival, I found that the patient, a secundipara, aged 22, had been delivered naturally, at three o'clock in the morning, of a living female child. The midwife stated that she sent for me because she had been unable to deliver the placenta. On examination, I found that the umbilical cord had been separated from the placenta. The external os uteri was quite dilated, as was the cervical cavity; but the os internum and the circle of muscular fibres above it, called Bandl's ring, the chief seat of hour-glass contraction, were firmly contracted, and only admitted a finger, by which the placenta could be felt in the uterus. I now learned that the midwife, hoping to accelerate the third stage of labor, had given the patient a dose of ergot as soon as the child was born. I found it impossible to get my hand into the uterus to deliver the placenta. Bearing in mind the remarkable power which nitrite of amyl possesses in relaxing tension in the blood vessels, I determined to test its action on the uterine spasm. The patient had three drops of the nitrite of amyl given her on a handkerchief, to inhale, by Mr. Lingard. During the inhalation, the ring of muscular fibres round the os internum, which had been so rigid as to be absolutely undilatable, steadily yielded, until I could pass the whole hand into the uterus and detach the placenta, which was universally adherent. There was no hemorrhage whatever, and the placenta itself presented a remarkably exsanguine appearance. On referring to the third edition of my father's work on "Obstetric Operations," I found the following: "We possess in ergot a great, a dangerous power of augmenting the force of the uterus. We want an agent endowed with the opposite effect, that will control and suppress uterine action. I consulted Dr. Richardson on this point. He tells me the desired power exists in the nitrite of amyl. Three minims of this added to one drachm of ether taken by inhalation is the form he recommends. It does not produce unconsciousness; but it is an anæsthetic as well as a sedative of muscular action. It is the antidote or opposite force to ergot. In it we have the desired 'epechontocic agent.'" In the case in question, the drug certainly acted admirably. It relaxed the irregular contraction of the uterus, and acted as a sedative and anæsthetic without producing unconsciousness. The case is also instructive as an example of the danger which may result from the administration of ergot before the expulsion of the placenta. The tetanic action was no doubt increased by the traction which had been made on the cord. It is well known that ergot, when given before the birth of the child, may cause its death. I believe this results from the blood being squeezed out of the placenta by the uterus. Although in cases of irregular contraction of the uterus that organ is firmly contracted, the contraction does not separate the placenta. On the contrary, in the cases I have seen, the placenta has been firmly adherent, as it was in this case. I am not aware that nitrite of amyl has been used to relax uterine spasm before. In it we possess, I think, a new and trustworthy addition to the resources at command for overcoming spasmodic or trismic contractions, which will not always yield to other remedies.

Septic Endocarditis.

The *Lancet* says that Professor Leyden, writing on this interesting subject in the *Zeitschrift für Klinische Medicin*, draws attention to the frequent resemblance of the temperature curve in this disease to that of intermittent fever, a resemblance that has been many times noted by others. He distinguishes, clinically, four groups of cases, as follows: The first group includes those cases in which the endocarditis forms part of a pyæmic or septic process. This is best known in connection with puerperal septicæmia, in which ulcerative (infectious parasitic) endocarditis is not infrequent. It is also sometimes met with in septicæmia and phlebitis following injuries. Leyden observed one such case complicated with abscess of the liver. In these cases of endocarditis, pyæmic or septic *par excellence*, the cardiac condition is part of a widespread septic process, and the rigors occurring in the disease may be symptomatic of the general sepsis, quite as much as of the endocarditis. In his second group he places those cases of endocarditis which are marked by a more or less intense and irregular pyrexia and erratic rigors. Traube has recorded such cases, so has Ditten. Volmer relates one in which typhoid symptoms ushered in the attack; then rigors occurred, and the diagnosis of endocarditis was made. Leyden remembers one such case in Traube's clinic, where a correct diagnosis of pulmonary valvular insufficiency was made, the endocarditis being accompanied by an irregular intermitting fever. The third and fourth groups comprise cases in which the temperature-curve corresponds, more or less closely, to that of intermittent fever, with periods of paroxysmal exacerbation, alternating with apyrexia, sometimes for a short period, regularly quotidian and tertian in type. In the third group he places those cases in which the signs of car-

diac disease are ill-marked, or even in abeyance until near the close of life; while in the fourth he describes those cases where heart disease has been long established, the intermitting fever arising as a final complication. He gives details of four such cases, and ascribes the issue to the supervention of some septic influence, sometimes ascertainable, and confirmed after death by the presence of mycotic organisms in the vegetations, and secondary emboli. It may be added as an interesting historical fact that Leyden states that he has been unable to find records of these types of fatal endocarditis among older writers. This we believe is quite true, and in the face of the very striking clinical manifestations, is a little remarkable, and not wholly to be explained by the absence of thermometric observations. It is more than likely that some cases known to our forefathers as malignant ague really belonged to this class of disease, although even Morgagni, who faithfully describes post-mortem appearances in association with clinical facts, gives no case that would now bear this interpretation.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The Noblest Science—Annual Address at McKendree College, Lebanon, Ill., by Henry A. Castle.

——The Twenty-second Annual Announcement of the Bellevue Hospital Medical College has been received.

——We have received the Fifty-fourth Annual Announcement of the Medical College of the State of South Carolina.

——A Clinical Lecture on Idiocy and Imbecility, by Isaac N. Kerlin, M. D. This is a reprint from the Medical and Surgical Reporter.

——We have received the fourth biennial report of the State Board of Health of Maryland, a volume that reflects credit upon the energy and enterprise of the board.

——The annual commencement of the American Veterinary College of the University of the State of New York, No. 141 West 54th street, New York City, has been received.

——We have received the fifty-eighth annual announcement of the Jefferson Medical College of Philadelphia, which shows the institution to be in a most flourishing condition.

——We have received the report of the first commencement exercises of the Albany College of Pharmacy, containing the address delivered to the graduating class by Professor David Murray, PH.D., LL.D., as well as the second annual catalogue and announcement of the same institution.

——We have received the Biennial Report of the Board of Health of the Sandwich Islands, which contains much of interest, among other matters being an account of an official visit to the Leper settlement at Kalawao, Molokai.

——Refraction of the Eye, as distinguished from accommodation and estimated as an equivalent, from the index of refraction, by H. Culbertson, M.D., Assistant Surgeon, U. S. A., retired. This paper comes to us as a reprint from the Cincinnati *Lancet and Clinic*, May 27th, 1882.

——"Contributions to the Physiology and Pathology of the Nervous System." Part iv. From the private physiological laboratory of Isaac Ott, M.D. This pamphlet contains articles on the following subjects: The Physiology of the Spinal Cord; the Physiological Action of Glycerine; the Physiological Action of Hyoscyamia; the Cilio-spinal Centres; the Action of an Irritant.

——Papers and proceedings of the National Association for the Protection of the Insane and the Prevention of Insanity, at the stated meeting held in New York City, January 20th, 1882. This pamphlet, published by G. P. Putnam's Sons, New York City, is well worthy of perusal by all physicians, philanthropists, and all public spirited citizens, since it deals with one of the most perplexing social problems of the day.

BOOK NOTICES.

Clinical Lectures on Diseases of the Urinary Organs. By Sir Henry Thompson, Surgeon Extraordinary to His Majesty the King of the Belgians, etc. Sixth London edition. Illustrated with 73 wood engravings. pp. 175. Philadelphia: P. Blakiston, Son & Co. 1882. Price 75 cents.

Sir Henry Thompson stands so preëminent in all that relates to diseases of the urinary organs that one never hears his name mentioned but his specialty comes prominently up into the mind. There is probably no man living in the world whose utterances and teachings in this particular branch of surgery are so well worth studying. His experience has been incalculably great and extensive. Every physician must know something about the morbid conditions of these important organs, and he cannot do better than to learn from the well-stocked mind of Sir Henry Thompson. By using less expensive paper and binding the book in paper, the publishers have been enabled to offer all this valuable material at a very low price.

THE

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D. G. BRINTON, M.D., EDITOR.

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THE DUTY OF RAILROADS TO PROVIDE AGAINST ACCIDENTS.

The sad accident which recently occurred near Long Branch, by the separation of the rails, and the falling of the train into a shallow river, was attended by scenes which again illustrated the necessity of railroads forming a regular staff of surgeons, and providing them with the means of attending immediately to fractures and similar injuries.

Every road should have a set of splints, bandages, lint, chloroform, and other materials required in the first attention to wounds, placed in charge of the station agent, at every important station. A surgeon-in chief and division surgeons should be appointed, prepared to come on any emergency, and some of the employees of the road should be instructed in the principles of ambulance duties, as of lifting and carrying wounded men, applying bandages, etc.

Even where an accident occurs close to a great city these precautions would be wise, and on the long lines which traverse the less thickly settled portions of our country, their observance should be enforced by law.

DR. JOHN L. ATLEE.

The venerable and celebrated Pennsylvania physician, who has just been honored by a unanimous election as President of the American Medical Association, is a *man* among men, a true scholar, gentleman, physician.

Dr. JOHN LIGHT ATLEE was born in Lancaster, Pa., November 2d, 1799. His father was Col. WILLIAM PITT ATLEE, and his grandfather the Hon. WILLIAM AUGUSTUS ATLEE. He studied medicine with SAMUEL HUMES, M. D., commencing in 1815, and graduated from the University of Pennsylvania in April, 1820. He then began practice in Lancaster, where he yet remains. He was active in the organization of the Lancaster City and County Medical Societies, and was twice elected president. He was one of the originators of the State Medical Society, in 1848; in 1857 he was elected president, and was elected one of the vice-presidents of the American Medical Association in 1868. At the union of Franklin and Marshall Colleges he became Professor of Anatomy and Physiology, and so continued until 1869. He has always taken a lively interest in the cause of education, and having been appointed a school director in 1822, he was for more than forty years an active and useful member of the board. He is a Trustee of Franklin and Marshall College, as well as of the Bishop Bowman Church Home, of Lancaster. He has been a contributor to the *American Journal of the Medical Sciences*, as well as to many others. He revived the operation of ovariotomy in 1843, and was the first to successfully remove both ovaries at one operation. He was married, March 12th, 1822, to SARAH H., eldest daughter of the late Hon. WALTER FRANKLIN, President Judge of the Courts of Lancaster and York Counties. He has two sons physicians, one of them the well-known ovariotomist, Dr. WALTER F. ATLEE, of Philadelphia. Dr. ATLEE's exceptional charac-

ter, long experience and well-known integrity eminently fit him for the position to which he has been elected.

Notes and Comments.

Spina Bifida Cured by Injections of Iodine.

Mr. A. Pearce Gould reported the following case to the Clinical Society of London (*British Medical Journal*): A boy, aged six months, was brought into the hospital, with a tumor over the lumbar vertebra about the size and shape of a large tomato. It was translucent, fluctuating, sessile, covered with healthy skin. The child was otherwise perfectly healthy. The tumor became tense when the child cried, and pressure on it caused fullness of the anterior fontanelle. One ounce of fluid was drawn off, and one drachm of Morton's iodo-glycerine solution injected. This producing no effect, the operation was repeated a week later, when half a drachm of the same solution was injected. After this the tumor became solid and shrank. The fluid removed was analyzed, and found not to contain even a trace of sugar, showing that it was arachnoid and not cerebro-spinal fluid. During the discussion that followed, it seemed to be the sense of the Society that while this was the best treatment known at present, for spina bifida, the successful cases were very few and far between. The President, in conclusion, stated that he believed that Dr. Morton now thought it advisable not to draw off the fluid from the spina bifida, but merely to inject the fluid, that being quite sufficient for the treatment of the case.

Prostatic Obstructions.

Dr. Reginald Harrison recently read a paper before the Medical Society of London, in which he advocated the wisdom of early treatment of prostatic obstruction. He believes that at least 33 per cent. of the men who pass 55 years of age, sooner or later, have enlargement of the prostate. He deprecated the idea of waiting until the prostate became so enlarged as to interfere with the passage of urine. He denied the generally taught idea that this gland is so very sensitive, and so resents mechanical interference; it will bear as much manipulation without resultant evil as any part of the body. He uses gum-elastic instruments, two to four inches longer in the stem than usual, with an expanded portion an inch from the tip, which is made to enter the bladder. Thus the prostatic urethra is subjected to stretching, both upon the introduction and the withdrawal of the instrument. If this dilatation is not carried out too rapidly, no irritation will ensue. He closed his remarks by urging, strongly, this early treatment, which, when properly and carefully carried out, will do much to prevent subsequent very serious trouble.

Epithelioma Removed by Scraping.

At a recent meeting of the Clinical Society of London (*Medical Times and Gazette*), Mr. T. Holmes related a case of a young man suffering from an ulcer of the leg, which presented all the appearances of epithelioma, both to the naked eye and under the microscope. It was very large, almost isolating the tendo-achillis, and was accompanied by the swelling of the inguinal glands. Mr. Holmes considered that in former times these symptoms would have been considered to warrant amputation. In this case he removed all the epitheliomatous tissue, and then made a free application of the actual cautery. Sound cicatrization ensued and the enlarged glands subsided entirely. Many other gentlemen related their experience in this matter, which was all corroborative of Mr. Holmes', who closed by saying, he suspected that many growths originally local tended to become epitheliomatous and constitutional in type. His case certainly corresponded to the ordinary descriptions of epithelioma, and he would urge that such cases, if early treated, might result in the extirpation of a disease rapidly becoming malignant.

Neuralgia.

Dr. Reginald G. Alexander, writing in the *Lancet*, makes the statement that it is now a well established fact that neuralgia is a disease arising from debility, and since it is very often mistaken for rheumatism, gout, spinal irritation, etc., he gives the following diagnostic points by which it can be differentiated: 1. Neuralgia occurs when general debility exists, is increased by fatigue, mental or bodily, but is relieved by food, and sometimes by stimulants. 2. The pain, which is sudden, darting and excruciating, exhibits remarkable intermissions, especially in the early stages of the complaint, and the constitutional disturbance is slight (temp., pulse, etc., frequently normal). 3. It is usually unilateral. 4. As the disease advances, tender spots are formed in the course of the affected nerves.

Realizing that debility plays so important a part in this disease, he says, as would be supposed, that the treatment must be directed in every case toward improving the general health. Pure air night and day, great cleanliness and sponging with sea salt and water. Hypodermic injections of morphia give immediate relief and are really curative, since by allaying pain they allow the tonic measures to be carried out.

Diet in Asthma and Bronchitis.

Dr. John C. Thorowgood calls attention, in the *Medical Press and Circular*, to the importance of carefully regulating the diet in cases of asthma and bronchitis. He describes how an overly distended stomach, by pressing on the diaphragm, may offer a mechanical impediment to free respiration, and may also interfere with the proper action of the heart. He mentions a gentleman who gained a great reputation for his ability to cure bronchitis and bronchial asthma by diet, and says that the great secret of this diet cure was judiciously starving the patient for a time. The stomach may be, to a certain extent, sluggish, so that it will not at the time feel any inconvenience from the excess of food forced upon it, but in an hour or two dyspepsia in some form will indicate the outrage that has been perpetrated. The food used should be nutritious, without being bulky. A lightly boiled egg, the wing of a chicken, or some fish, with one cup of tea, coffee or cocoa, and toast, will form three alternatives of breakfast fare. Soups should be avoided at dinner, because they tend to distend the stomach. Vegetables should be used sparingly. Malt liquors, pastry, cheese and dessert should be rigidly eschewed, and for drink, claret, with water, or lemon juice and water, may be allowed. Effervescing drinks of all kinds are not to be commended. By this arrangement of diet we keep up nutrition, while we avoid overloading the stomach, and so oppressing the diaphragm. The heart and lungs are enabled to act freely, and the danger of sudden stoppage of the first named organ is put at a distance.

Hereditary and Non-Hereditary Phthisis.

Dr. Reginald E. Thompson, in the course of a lecture on this subject, says (*Lancet*) that after examining a very large number of cases he finds the proportion of hereditary to non-hereditary cases to be 36 per cent., or, he says, the relative number may be roughly put as one hereditary to two non-hereditary.

The following numbers represent the relative proportions in which the several members of the families were implicated in the disease:—

Father alone	168	
Ditto, with one or more brothers	34	252
Ditto, with brothers and sisters	50	
Mother alone	158	
Ditto, with one or more brothers	25	241
Ditto, with brothers and sisters	58	
Father and mother	40	
Ditto, with one or more brothers	8	68
Ditto, with brothers and sisters	20	
Uncle	47	
Aunt	37	
Grandfather	7	439
Grandmother	5	
Sisters, with one or more brothers	152	
Brothers only	191	
Total		1000

Self-Mutilation.

Dr. Thomas Partridge thus writes to the *British Medical Journal*:—

At the present time, when the subject of self-mutilation is of so much interest, the following case may be worth notice, not, perhaps, from a medico-legal point of view, as the one recently under public notice, but as showing that some persons will inflict severe pain and injure themselves, at the risk of their own lives, from various motives.

Several years ago, when assistant-surgeon in a foreign naval service, my ship was stationed for three weeks in an extreme northern port of America. During our stay, several men contracted syphilis from the half-breeds (Indian and French). Three weeks or a month afterwards, when we had returned to our depôt, I was summoned to the surgical room to see a stoker, said to be dying. On arrival, I found him pallid, with a weak pulse, and very exhausted. On removal to the sick bay, I noticed a discoloration of the trousers about the thighs; and, on examination, detected bleeding from the penis. On retracting the prepuce, a jet of red blood spurted out. Calling in the assistance of my chief, we succeeded in stopping the hemorrhage by pressure and styptics, but, as may be imagined, not without some trouble. It transpired that the poor fellow, an Irishman, of low mental type, had a chancre. He thought to get rid of it by incision, and in doing so, wounded the dorsalis penis artery. The pocket-knife with which he cut himself was in his pocket, one blade having a smear of blood on it. Had a little longer time elapsed before he was noticed, death would have ensued, perhaps leading to various sur-

mises ; and as he was disliked by his mates, this might possibly have caused unjust suspicions against one or other of them.

The Growth of Bacteria.

In the *Medical Press and Circular*, Dr. David Goyder says that a blood heat is most favorable for the growth of bacteria. Cold to the freezing point does not kill, nor heat to 250° F. destroy the life of spores, but both arrest their development. Compressed air and oxygen at first increase, but ultimately destroy spores and bacteria, and prevent development. Ozone at once destroys them. Pure hydrogen at first excites and then kills. Carbonic acid paralyzes but does not prevent their resuscitation by oxygen. Boracic acid kills them, and carbolic acid to $\frac{1}{20}$ per cent. prevents all development. Cohn has calculated that a single bacterial rod, by growth and division, will produce in two days of forty-eight hours the enormous number of 281,500,000,000, and at the same rate of development it would fill the ocean in five days ; but, of course, other telluric influences prevent this.

Special Reports.

Mo. VI.—MICRO-GERMS.

BY DR. W. F. MUHLENBERG,
Of Reading, Pa.

(*Concluded from Vol.* XLVI, *p.* 615.)

In judging of the character of diseases produced by inoculation with the so-called specific germs, we must be thoroughly convinced that the disease produced is the one suspected, and not septicæmia or a local tuberculosis.* Animals must be proved to be able to take a certain disease, which resembles in its symptomatology that affecting man, and everything tending to interfere with or obscure a precise diagnosis must be excluded. Animals vary much more in their temperatures than man, and the effect of slight injuries, or even fright (particularly in rabbits) is very marked.†

If an organism be generated successively, in any medium, for a long period, it must become habituated to it; and, on its transference to another medium will require time to re-habituate itself. Its virulence may be interrupted by cultivation in the body (inoculation).

The supposed conversion of bacilli may be due to the fact that, as two media are ordinarily used, in the first the one organism was too subordinate to be noticed, whereas the second medium, suiting its necessities much better, may cause it to grow so vigorously as to crowd out and displace the bacillus predominant in the first medium. Pasteur's solution becomes milky, Cohn's moderately cloudy, and fresh urine slightly tinged, while a 2 per cent. solution of carbolic acid shows no effect, if, under like conditions, one drop of putrid fluid be added to each. The bacillus subtilis grows in its original medium to double its length, without changing its diameter; and then breaks into two rods, but, on the addition of sugar or serum to the fluid, forms filaments, instead of dividing. The development of germs appears to depend on the fluid and mode of culture used (31). In one case no permanent spores are found, in another no zooglœa mass. The micrococcus prodigiosus, grown on potatoes, is crowded out by bacterium, like the bacterium termo. Blue cocci, cultivated in Pasteur's solution, become colorless, but on admixture with pus, become blue, while, planted on potatoes, become red.

Septicæmia in mice (28) is always produced by the smallest drop of a culture fluid containing the micrococci, while in rabbits they produce an erysipelatous gangrene of the ear, with colonies of rosary-like micrococci, which can be cultivated in field mice, although they are insusceptible to the bacillus anthracis. Klebs, (32) one of the great authorities on mycology, considers the bacillus anthracis the cause of Charbon, and the bacillus malariæ, bacillus typhi exanthematici, and the bacillus typhi abdominalis,* the best examples of so-called

* Tuberculosis is now generally considered to be inoculable in animals; even in the shape of phthisical pus (30), and perhaps, as Rindfleisch suggests, the reason why many previous attempts at inoculation have failed, is because we are all hereditarily habituated more or less to the poison; but, even if micrococci are the vehicles of transportation, it is possible for them to be carried off by the blood sufficiently rapidly to do no harm.

† In the septicæmia of rabbits, immediately after inoculation, there is a rise of temperature of 2°-3° C., while, before death, it falls below the normal standard. There is also loss of appetite, debility, diffuse cellulitis, and occasionally a purulent collection near the puncture, while the subcutaneous connective tissue is full of bloody serum and micrococci. In judging of the bacillus malariæ, three factors were considered necessary to prove intermittent fever in rabbits.

1st. Distinct, intermittent feverish attacks.

2d. Enlargement of the spleen, firm, but not soft, as in septic spleen.

3d. Absence of marked diminution of the animal's weight, and the existence of black pigment in the spleen, blood and marrow (due probably to a liberation of iron from the hæmoglobin), as well as, *post-mortem*, absence of pus.

* The bacillus typhi (33) is found mainly in the enlarged lymphatics and spleen, while the bacillus of tubercular inflammation is found in the intestines. This same bacillus (34) has been found in drinking water, and appears to produce the same disease in rabbits.

specific germs, and views them as pathognomonic. While all acute abscesses (25) are full of micrococci, none are found in cold abscesses. There is only a serous discharge, where no micrococci are present in wounds. Pathogenic bacteria must enter the system in certain numbers to survive, or become virulent, for, if (35) the vitality of a rabbit is lowered by the administration of phosphorus, micrococci, which under other circumstances, do no harm, increase so rapidly as to be fatal. It is believed, (36) that a septic nephritis is frequently produced by the direct entrance of micrococci into the kidneys.

In the neighborhood where these colonies of micrococci are found, a virulent inflammatory action can be observed, while the signs of a diffused nephritis are present in the parenchyma. The micrococci act as emboli, and are found in the small intertubular arteries. Different facts, lately determined, render it probable that germs can traverse the glomeruli of the kidneys. The filtration of fat (37), and of bacilli anthracis (38), from the blood has been almost conclusively established; and, in addition, it has been shown (39) that the urine of healthy persons, if the access of air is prevented, contains no germs nor bacteria, remains acid, and does not undergo decomposition; while, on the other hand, (40) in infectious diseases, like scarlatina and typhoid fever, they are often found in great quantities in the urine.* In places robbed of their epithelium, (14) micrococci quickly enter the lymphatics and blood vessels, and are found in contact with the blood, pus, and plasma-cells, and (as is seen after injection of cinnabar) appear to enter bodily into them, destroy the membrane, and are excreted by the kidneys, or deposited on some mucous surface. Invading the body as they do, they either undergo the usual harmless transformation and perish, or, by some accident favoring their growth, like the effect of various culture fluids upon them, more readily transmit their species, and, when produced in immense quantities, by robbing the tissue underlying them, or some element necessary to their existence, bring on various disorders.

The fact of the presence of germs in various parts of the body, and various excretions and secretions, furnishes as yet no reliable criterion of their previous action on the organism. The question that always presents itself is, whether we can recognize with certainty, from these residual organisms, the prior existence of some definite disease. It has been found that in frogs, dying of septicæmia (Wassilieff, Strasburg Institute) a development of germs takes place *post-mortem;* while, in frogs not dying of septicæmia, none can be discovered, *ante, aut post-mortem;* yet sections of cadavers of dogs (Billroth *l. c.*) made immediately after death, and plunged into mercury or paraffin, have always been found full of germs. Saliva (43) injected into rabbits has produced septicæmia, but, on cultivation, it has been found due to germs. One general view seems to prevail, that septic affections arise without the presence of germs, and are produced by a substance formed by putrefaction, to which poisonous properties are ascribed. This view appears to be supported by the fact that, frequently, no considerable quantity of germs are found in the organism; but is untenable, because, as in relapsing and malarial fevers, they may disappear temporarily; and rarely all the fluids or organs of the body are examined; and by filtering such a septic fluid we can inoculate it with perfect safety. Whereas the separated germs, cultivated even to the thirtieth or sixtieth generation in harmless fluids, and representing only a billionth part of any chemical or bioplastic series, always produce disease. The apparent conversions of harmless germs into virulent ones, proves also there is no chemical poison. Many authorities say surgical injuries of various kinds, without external lesions, have had as a consequence septicæmia, and that although germs have been found in the purulent or muco-purulent secretions, they are either a post-mortem change, or a part of a process not injurious to the system. Some experiments appear to prove that the germs admitted to be omnipresent in the body, perhaps, after such accidents, find a nidus for their increase and peculiar action in the disorganized tissues. Ordinarily (44) after the subcutaneous castration of rams, a simple withering or calcification of the testicle ensues, but if, before castration, an injection of a germ-containing fluid is made into the blood, gangrene of the testicle is invariably produced, except when all the vessels leading to the testicle have been ligated. The

*Some interesting (41) cases of nephritic mycoses have been recently described, in which, post-mortem, were found tube-casts of a particular variety, so called germ-casts (Pilz-cylinder).

The tubes were found robbed of their epithelium, and colonies of micrococci were seen blocking up the tubules. These casts appeared to consist of a homogeneous vitreous basal-membrane, covered with micrococci. They were not produced by septicæmia, nor by ascent from the bladder. The symptoms of the disease were those of meningitis, but post-mortem, no lesions were found in the brain.

An acute nephritis (19) is often present with inflammatory affections of the tonsil, in which micrococci are found in great quantities in the urine. As one author says (42), it is not difficult to conceive that a mycelium-like growth of beaded-filaments, like micrococci, might act destructively on the lining membrane of the urinary passages.

germs in the blood, consequently, seem to be few, and not to increase without some stimulus. In the mouth are found, normally, the leptothrix pussilla, the leptothrix buccalis, the spirochæte dentium, the penecillium microsporinum, and a micrococcus which is colored blue by iodine. Normally (45) in the intestinal contents are found, micrococci, the bacterium termo, the bacillus subtilis, and saccharo mycetes, all stained yellow or brown by iodine, and the clestridium butyricum (Pasteur's vibrion butyrique) and a smaller variety, stained blue by iodine.

Iodoform (46), used now so largely as an antiseptic, exercises a constant antagonizing influence upon the germination of bacteria, and, if used in quantity, prevents the origin of putrefactive processes.

Sunlight seems to have some slight effect upon the growth of germs, as turbidity (47) did not take place in culture tubes exposed to its influence until the third day, whereas, ordinarily, it was noticeable on the first day. The following table gives the antiseptic as well as aseptic action of various bodies on cultivated flesh-extract solutions (48):—

Aseptic.		*Antiseptic.*
1 : 25250	Corrosive sublimate,	1 : 5805
1 : 30208	Chlorine,	1 : 22768
1 : 11135.	Hypochlorite of calcium,	1 : 3720
1 : 6448	Sulphurous acid,	1 : 2009
1 : 6308	Bromine,	1 : 2550
1 : 5704	Sulphuric acid,	1 : 2020
1 : 5020	Iodine,	1 : 1548
1 : 4268	Acetate of alumina,	1 : 427
1 : 3353	Oil of mustard,	1 : 591
1 : 2867	Benzoic acid,	1 : 410
1 : 2860	Borosalicylate of soda,	1 : 72
1 : 2005	Picric acid,	1 : 1001
1 : 1340	Thymol,	1 : 109
1 : 1003	Salicylic acid,	1 : 60
1 : 1001	Permanganate of potash,	1 : 150
1 : 669	Carbolic acid,	1 : 22
1 : 60	Chloroform,	1 : 112
1 : 62	Borax,	1 : 48
1 : 21	Alcohol,	1 : 4
1 : 14	Eucalyptol,	1 : 116

The following table, by another investigator, shows the antiseptic action of various bodies on the germination of bacteria (49):—

Corrosive sublimate	1 : 20000
Thymol	1 : 2000
Sodium benzoate	1 : 2000
Creasote	1 : 1000
Ol. thym	1 : 1000
Oil of caraway	1 : 1000
Benzoic acid	1 : 1000
Methyl salicylic acid	1 : 1000
Salicylic acid	1 : 666
Carbolic acid	1 : 200
Quinia	1 : 200
Sulphuric acid	1 : 150
Boracic acid	1 : 133
Sulphate of copper	1 : 133
Hydrochloric acid	1 : 75
Sulphate of zinc	1 : 50
Alcohol	1 : 50
Chlorine	1 : 25000
Iodine	1 : 5000
Bromine	1 : 3333
Sulphurous acid	1 : 666
Benzoic acid	1 : 250

In the molten liquid.

Dr. Sternberg (50), finding that the injection of some blood or serum from the subcutaneous connective tissue of a rabbit, killed by septicæmia, invariably produced death in rabbits in from twenty-four to forty-eight hours, thinks it is manifest that a negative result, after treatment with a disinfectant, is proof of its power to destroy the potentiality of the injected material. He finds that chlorine, nitrous acid and sulphurous acid gases are reliable disinfectants, in the proportion of one volume to one hundred volumes of air; and that the following bodies, added to one hundred parts of such a fluid, act as preventives:—

Iodine	.2	Salicylic acid	1.25
Chromic acid	.1	Zinc chloride	2.5
Ferric sulphate	.12	Caustic potash	1.
Cupric sulphate	.25	Iron alum	1.
Thymol, in alcohol	.25	Zinc sulphate	1.25
Caustic soda	.25	Potass. sulphuret.	2.
Nitric acid	.25	Tannic acid	1.
Sulphuric acid	.5	Boracic acid	2.
Iron sesq. chloride	.5	Potass. permang.	2.
Sodium hyposulph	.5	Borax	2 5
Hydrochloric acid	.5	Glycerine	12.5
Carbolic acid*	1.25	Alcohol, 95 p.c.	25.

Onimus (52) found that alcohol, iodine and sulphuric acid rendered septicæmic blood harmless, but neither quinia nor 45° C. were of any avail.

Davaine (53) found that $\frac{1}{10000}$ of a drop of blood from splenic fever cases, on inoculation, caused splenic fever, but that this was nullified by heating it to 55° C. for five minutes; and that, after the addition of one part of chromic acid to 7000 parts of diluted splenic fever blood, the animal died, while 1 : 5000 parts was sufficient to save its life. His experiments showed that animals died or survived by the use of the following proportions of antiseptics:—

Killed.	*Substance.*	*Saved.*
1 : 5000	Hydrochloric acid,	1 : 3000
1 : 300	Ammonia,	1 : 150
1 : 200	Silicate of soda,	1 : 150
1 : 500	Caustic potash,	1 : 375
1 : 200	Wine vinegar,	1 : 150
1 : 2000	Permang. of potash,	1 : 1250
1 : 8000	Sulphuric acid,	1 : 5000

And subsequently (54), when he mixed one part of splenic fever blood with 1000 parts of

* It requires the one-twentieth part of carbolic acid to prevent the growth of germs in beef extract (51).

water, and then one part of this mixture with ten of alcohol, he found it harmless.

Hatton (55) proved that phenol, alcohol and permanganate of potash were destructive to germs; and also cyanogen, until decomposed into oxalate of ammonia. While one hour's exposure (56) to dry heat, at 60° C., kills the bacteria of putrefaction, 20° C. does not, and it requires 75° C. (57) to kill the micrococcus prodigiosus.

Water in excess is sufficient to prevent the rapid growth of germs; but the most interesting fact is that the most powerful antiseptics and aseptics known are those chemical bodies produced by the disorganization of the germs themselves. The fact that carbolic acid, one of the reliable antiseptics, is the product of their decomposition, shows that we know, as yet, very little about their life, history, or the proper modes of developing or preventing their growth. Wernich (4) gives the antiseptic action of these aromatic bodies, as shown by the hindrance of the development of bacteria in 100 gm. of Pasteur's fluid, as follows: Skatol .05, phenylpropionic acid .1, indol 1, cresol .2, phenylacetic acid .25, phenol .5.

The diversity of action of antiseptics as deduced by different authorities, is undoubtedly due to the fact that various germs were experimented with, and that, in some cases, the bacteria, more readily antagonized, took the place of permanent spores. En résumé.

The bacteria of decomposition (58) appear to be the active agents in what is known as blood-poisoning, as has been shown by the investigations of Lister and Koch. It is affirmed that (59) "the micrococci of diphtheria may act upon the exudation of the trachea as the yeast plant acts upon sugar, and cause the production of a septic poison, which differs from that of ordinary putrefaction, and when absorbed, bears such relations to the system as to cause diphtheria;" and that (8) "they do not differ, as far as observed, from the micrococci of furred tongue, except in their tendency to grow in culture fluids; while their rapidity of growth is in direct proportion to the malignancy of the case." Dr. Sternberg (60), our great authority in this country, after advancing some valid reasons to show that as yet the proof of malaria being caused by the bacillus malariæ (Klebs and Tommasi-Crudeli) is unsatisfactory, says: "While, however, the evidence is not satisfactory, there is nothing in my researches to indicate that the so-called bacillus malariæ, or some other of the micro-organisms associated with it, is not the active agent in the causation of malarial fever in man; on the other hand, there are many circumstances in favor of the hypothesis that the etiology of this fever is connected, directly or indirectly, with the presence of these organisms or their germs in the air and water of malarial localities." Many authorities maintain that the micrococci of septicæmia are only the carriers of a poison, capable of producing the disease, and among them, Billroth (*l. c.*); "are only injections, after they themselves have been injected."

Others assume that the micrococci give rise to a chemical poison, which acts as a necrotic to the tissues, and which may be eventually obtained from the germs themselves, while others think there is a direct perforation of the tissues by the germs, and that they can wander into the blood corpuscles (Klebs and Hueter); others think that the bacteria, ordinarily present acquire power to change their locality, or mode of development.* It is believed (22) that during inflammation, processes arise in the tissues, which increase their resisting power to the germs, and, in many cases, prevent the natural modes of cure of infectious diseases. It is manifest (62) that the human body is used, in many places, as a nutrient substance by these organisms. The dependence of these organisms on the culture-media used, and the fact that micro-organisms, after cultivation, can be transplanted from one animal to another, while their life history is obscure, renders it probable that many diseases are caused by them.

The following diseases are common to men and animals (63): Glanders and farcy in horses; rabies in dogs and cats (also in skunks); anthrax in all domestic animals; tuberculosis in all animals; Asiatic cholora in all animals; milk sickness in cows; smallpox in chickens, pigeons.†

The germ diseases are also found in lower orders of animals, such as (65) the mucor-melitiphorus in bees (which are, as is well known, easily killed by yeast, a saccharomycete); petrine, flacherii and muscardine in silk-worms; the well known autumnal epidemic of house flies; and different varieties among fishes and birds. Pasteur believes that the germs of anthrax are conveyed to the surface of the earth, from the offal-

* Typhoid fever, *e. g.* in common with all intestinal mycoses, has the properties of making its cause affect the system, by its action on the intestinal canal. The bacteria found in the glandular apparatus are part of the metamorphosis of the bacillus subtilis, abundantly present in the large intestine. The organisms, living purely saprophytically in the colomi fæces, acquire the power to get into higher portions of the intestines, there accommodate themselves, and become invasive (61).

† Also in cattle, sheep, pigs, dogs, and apes, (64).

pits, by earthworms, but Koch has shown that they are very poor "messagers des germes." Our common insects, such as flies and mosquitoes, (Filaria-sickness), are now supposed to be carriers, as, contrary to the general opinion, the air is not crowded with germs as much as is supposed.

The portion of the system invaded seems to depend on the organisms, and, accordingly, various authors consider the respiratory tract (22), the intestinal tract (66), the tonsils (62), and skin as the favored localities of invasion.

These infectious matters appear to get in the air in dust form, more particularly as spores, but only after thorough drying.

Composed, as they are (67), of molecules of albumen and grape sugar, which ordinarily cannot be evaporated from a watery solution, it is hardly probable that ferments can be conveyed from any watery solution by currents of air.

The dried masses, or the residue of a dried fluid, transformed into dust by mechanical action of some kind, are subsequently wafted in all directions by currents of air. The presence of a gelatinous sort of material (especially in the case of the permanent spores) appears to cement the germs very firmly to the objects to which they were originally adherent.

It appears (68), from some experiments, that very strong currents of air cannot detach them from compact substances, as wood, iron and glass, while it requires only a weak current to free them from substances of an opposite or porous character, as cotton wool, silk, and the like. Currents of air, likewise, passing over or even through fluids, do not carry away with them any germs, unless the fluids become covered with foam. Some authors (67) even go so far as to say that moisture, and even dirt in houses, may assist in the purification of the atmosphere, by retaining the germs in contact with them.

In accordance with these facts, national hygiene would suggest (62) that no porous object, no bed nor mattress, should be cleansed in the bedroom. Wet cloths are best for removing dirt and germs from the walls and furniture. The safest means, also, for the removal of germs from the floor, or other surfaces to which they are adherent, is frequent and continued wiping of them with wet cloths; and with our present knowledge, it is far better to prevent the conveyance of a poison to the system than to neutralize it afterward.

Patients suffering from infectious diseases should have their own utensils, and not use a common water closet; not chiefly because the fæces may be a subsequent cause of infection, but to prevent the immediate deposit of germs on the rims of the seats. All vessels in use in a sick room should be washed out with a solution of at least five per cent. of carbolic acid. A plentiful stream of water through the water closets will carry away the germs; and the fæces can, with advantage, be buried or burned.

The urine should also be disinfected, and after sickness, all worthless matter burned, and valuable materials, where possible, disinfected by heat. Corrosive sublimate (and possibly calomel) is thought to be our most reliable internal antiseptic. Patients, where possible, should be washed with carbolic oil and water. What may be accomplished in future by a process of vaccination or attenuation of the hypothetical specific germs, is still problematical; but our present knowledge of germs warrants us in laboring in that direction, with the confident hope of securing some valuable humanitarian results. Single and very simple elementary principles in every department of science have led, through the persevering efforts of thoughtful individuals, to the most extended and beneficial consequences in human society. The telephone and electric light, in another department of pursuit, are now producing immense changes in the condition of society and the communication of thought; and the field of medicine is open in a similar way to reward the patient student of its mysteries with discoveries intimately connected with human happiness. As Franklin's simple experiment with the kite has led to the utilizing of the lightning of heaven for the benefit of humanity, so we may expect some future physician, by his labors, to make the very diseases of the human system contributory to their amelioration and cure.

(1) Senator (Berlin. Klin. Wochenschrift, 1868).
(2) Baumann (Pflüger's Archiv, Vol. XIII).
(3) Brieger (Chem. Bericht., XII, 1985, cited in Schmidt's Jahrbücher, Vol. 189, No. 3).
(4) Wernich (Die Aromat. Faulniss produkte in iesser Einwertung auf Spalt-und Sprosspilze).
(5) Hiller (Frerichs and Leyden's Zeitschrift, Vol. 3, No. 1).
(6) Howlett (London Lancet, April, 1 82).
(7) Nägeli amd Schwendener (Das Mikroskop) also N. die Niederen Pilze.
(8) Wood and Formad (Nat. Board of Health Bulletin Supplement, No. 17).
(9) Weigert (Jabores Benekt d. Schles. Gesell. f. Vaterland Cultur., 1875).
(10) Koch (Cohn's Beiträge Zur. Biol. der Pflanz, Vol. 2, No. 3).
(11) Billroth (Untersuch über die Vegetations formen von Coccobact. septica.
(12) Klebs and Tomassi-Crudeli (Archiv f. Exp. Patholog., Vol. XI, 1879).
(13) Eberth (Volkmann's Sammlung, No 213).
(14) Oertel (Ætiolog. der Infectionskrank).
(5) Talamon (cited in British Med. Journal, March 5th, 1881).

(16) Klebs (Archiv f. Exp. Patholog., Vol. XII, No. 2).
(17) Eberth (Virchow's Archiv, Vol. 83, p. 486).
(18) Klebs (Archiv f. Exp Patholog., Vol. XIII, p. 506).
(19) Kannenberg (Frerichs and Leyden's Zeitschrift, Vol. I. p. 509).
(20) Heydenreich (Rückfalls Typhus Morphologische Kränderung).
(21) Grawitz (Berlin. Klin. Wochenschrift, Vol. 14, 1881).
(22) Buchner (Ætiologie der Infectionskrank).
(23) Cohn and Mendelssohn (Beit. Zur. Biolog. der Pflanz, III).
(24) Pasteur (Address before International Medical Congress).
(25) Ogston (British Med. Journal, March 12th, 1881).
(26) Eidam (Cohn's Beiträg, 2. Biologie der Pflanz, I).
(27) Weroich (Cohn's Beiträg, 2. Biologie der Pflanz, III).
(28) Koch (Address before International Medical Congress).
(29) Tyndall (The floating matter of the air in relation to putrefaction and infection).
(30) Tappeiner (Virchow's Archiv, Vol. 82).
(31) Bucholtz (Archiv f. Exp. Patholog., VII).
(32) Klebs (Address before International Medical Congress).
(33) Eberth (Centralblatt f. d. Med. Wissen., Sept. 10th, 1881).
(34) Branlecht (Lancet, April, 1882).
(35) Cheyne (Trans. Patholog., Soc. of London, Vol. XXX).
(36) Leyden (Frerichs and Leyden's Zeitschrift, Vol. 3, No. 1).
(37) Scriba (Deutsch Zeits. f. Chirurg., XII).
(38) Cohnheim (Allgem. Patholog., II, 197).
(39) Leube (Frerichs and Leyden's Zeitschr., Vol. 3, No. 2).
(40) Frühaug (Diag. der Neueren Krank.)
(41) Litten (Frerichs and Leyden's Zeitschr., Vol. IV, 1-2).
(42) Roberts (British Med. Journal, Oct. 15th, 1881.)
(43) Sternberg. (Nat. Board of Health Bulletin, Vol. 2, No. 44).
(44) Chauveau. (Phenomines de Mortificat. Sur l' Animaux Vivant).
(45) Nothnagel. (Frerichs and Leyden's Zeitschrift, Vol. 3, No. 2).
(46) Mikulicz. (Wiener Klinik, January, 1882).
(47) Downes & Blunt. (Report of British Med. Association, 1881).
(48) De La Croix. (Cited in Schmidt's Jahrbuch, Vol. 191, No. 3).
(49) Bucholtz. Archiv f. Exp. Pathologie, Vol. 4, No. 1).
(50) Sternberg. (Vol. 3, No. 4, Nat. Board of Health Bulletin).
(51) Watson. (Am. Journal of Med. Sciences, Oct. 1880).
(52) Onimus. (Bull. de l' Acad. de Med. No. 36).
(53) Davaine. (Comp. Rendu. Vol. 72, No. 13).
(54) Davaine. (Comp. Rend. 84).
(55) Halton. (Frankland Prize Essay).
(56) Wolff. (Berlin. Klin. Wochenschrift, 1880, pp. 55.)
(57) Wernich. Uber die Desinfectionskraft der Woch. Hitze. Central. f. I. Med. Wiss., 1879, No. 13).
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(59) Wood & Formad. (Sup. No. 7, Nat. Board of Health Bulletin.
(60) Sternberg. (Sup. No. 14, Nat. Board of Health Bulletin.
(61) Wernich. (Frerichs and Leyden's Zeitschrift, Vol. IV. Nos. 1-2).
(62) Wernich. (Grundriss der Desinfectionslehre).
(63) Law. (Nat. Board of Health Bulletin, July 24, 1880).
(64) Bollinger. (Sammlung, No. 116)
(65) Bollinger. (Ætiology der Infectionskrankheiten).
(66) Koch. (Bericht des Gesundheit Amt).
(67) Nägele. (Die Niederen Pilze).
(68) Wernich. Volkmann's Sammlung, No. 179.

—Drs. Fordyce Barker, Austin Flint and John G. Adams, have been appointed delegates from the New York Academy of Medicine to the International Congress of Hygiene, which meets in Geneva, Switzerland, from the 4th to the 9th of September.

Correspondence.

Inception of International Medical Congress of 1876.

Ed. Med. and Surg. Reporter:—

The enclosed copy of letter concerning the origin and purposes of the late International Medical Congress, which was assembled in Philadelphia, in 1876, may interest your readers, and furnish reflection and data to those who may, in future years, seek to promote an object of the kind.

Marshall, Va. Fred. Horner, M.D.

[*Copy*].

United States Centennial Board of Finance,
904 Walnut Street,
Philadelphia, June 13, 1873.

Frederick Horner, M.D., (*retired*) *Surgeon, United States Navy.*

Dear Sir: I am very much obliged by your letter of the 11th inst., giving me an account of the action taken lately at St. Louis, by the American Medical Association, on the subject of the great Centennial Celebration of 1876.

At your request, I now, in addition to the verbal communications I have had the pleasure of making to you, will state how I think the medical profession in the United States may contribute to the honor and success of the Centennial.

First, by causing to be prepared a full history of the data of medical science in the United States in the year 1776, and to trace the progress during the century, marking the great discoveries and improvements that have been made in it, the introduction of new remedies, the changes that have taken place in the treatment of diseases, the forms of surgical instruments then in use, and the changes therein that have brought them to the present forms. Next, the establishment of the institutions, universities, colleges, schools, etc., in the order, chronologically, of their establishment, their location, and brief notices of their growth and present condition. This, mainly literary work, might be amplified to any extent needed for the presentation of a complete history of medicine and surgery in the United States.

Secondly, by arranging with the U. S. Centennial Commission for space in the Exhibition building for an anatomical and pathological museum, in which might be displayed all such objects as could, with propriety, be presented for popular inspection, and to such a museum might be added private rooms for collections that would only be appropriate for special inspection and study by professional men and students. Such a museum should also contain full specimens of the surgical instruments, bandages, etc., used in old times, and others of the intermediate and progressive periods, finally presenting those in use now.

Thirdly, the coöperation of the medical profession is earnestly desired in aiding our plan, and through the instrumentality of the state, county and city medical societies, such coöperation may be readily and effectually had.

Respectfully yours,
Fred. Fraley, *Secretary.*

Salicylic Acid as a Remedy for Corns.

ED. MED. AND SURG. REPORTER:—

I wish to call the attention of our profession to Mr. Gezou's remedy for corns, which you published in your journal, July 17, 1880, p. 63. In the "Transactions of the Medical Society of Pennsylvania," for the year 1876, p. 283, I reported the use of salicylic acid in the treatment of corns. I used it first in the treatment of soft corns, but very soon found it would remove hard ones as well. I applied it on cotton, and I can testify to the certainty of the effects of salicylic acid in the treatment of these painful excrescences on the toes.

It occurred to me, when I read Mr. Gezou's prescription, that the collodion which he employed to dissolve the acid would keep it well applied to the corn, and I have used it as prepared by him, in a great many cases, since July, 1880, and I can say with constant success. I have had a preference expressed in favor of the application of the acid on cotton, but I have, in almost all of my cases, used Mr. Gezou's preparation since July, 1880.

The collodion, as already mentioned, fixes the acid on the diseased part, and gives speedy relief by protecting it from friction. The cannabis indica acts as an anodyne, and the acid reduces and loosens the corn, so that it comes off in four or five days, adhering to the collodion. The remedy is applied with a camel's hair pencil, and if the corn is not well cured, the application may be repeated. In four or five days the patient should use a warm foot-bath and rub off the collodion. If any portion of the corn remains the acid should be applied again, and the treatment continued until the whole of the corn has disappeared. The skin will be soft and smooth, as in the healthy state.

The mixture dries immediately, and does not prevent for a moment the use of the stocking.

I have used salicylic acid in the treatment of bunions with like good results.

Collodion as found in the shops makes a good mixture, but I have found Dr. Edward R. Squibb's flexible collodion preferable, as it makes, with the other ingredients of the remedy, a denser fluid. The extract of cannabis should be the solid extract.

I have written this communication because I thought the slight notice of the remedy in the REPORTER did not attract the attention of its readers. I am sure no remedy has ever been proposed which is so useful in those painful affections of the feet as salicylic acid. There are many diseases of the human body which seem to be trifling and do not receive that attention which is due from physicians and surgeons, though exceedingly annoying to their patients. I have been the recipient of the gratitude of many patients for the relief from suffering which this remedy has given them.

Let us do all we can to cure them. Mr. Gezou's formula, as given in the REPORTER is:—

℞.	Salicylic acid,	30 parts or grs. xxx
	Ext. cannabis indica,	5 parts or grs. v
	Collodion,	240 parts or f℥ ss.

Easton, Pa. TRAILL GREEN, M.D.

NEWS AND MISCELLANY.

Massachusetts State Medical Society.

The one hundred and first annual meeting of the Massachusetts State Medical Society was in session in Boston, June 13th and 14th, 1882.

TUESDAY, JUNE 13.

The first paper, on "Cottage Hospitals," was read by Dr. L. W. Baker, of Baldwinsville. Small, detached, one-story buildings are more favorable, hygienically, for the treatment of patients than are the large, many-storied city hospitals. During the past twenty years the cottage hospitals of England have annually relieved some 50,000 patients. In that country it has been found that cheap wooden buildings provide the best accommodations for the sick. A cottage hospital, with capacity for at least twenty-five beds for children, can be erected, including land, for $5000.

Dr. J. W. Hannum, of Ludlow, followed with a paper on "Disease Germs," which was a review of the most recent discoveries in this branch of pathology.

Dr. Walter Ella then read a paper on the *Coincidence of Anal Fistula and Phthisis.* About twenty per cent. of patients suffering from fistula in ano are phthisical. The following are the reasons why, in his opinion, the phthisical have anal fistula so often: 1. Because of tubercular deposit in the rectal walls near the anus, with subsequent ulceration and fistula. 2. The retention in Morgagni's pockets of tuberculous diarrhœal discharges, subsequent inflammation, burrowing and fistula. 3. Inflammation starting in some of the numerous submucous rectal glands, which are prone, in tuberculous patients, to become inflamed, and abscess follow.

A paper on *Some Obscure Mental Symptoms of Disease* was then read by Dr. Charles F. Folsom.

AFTERNOON SESSION.

The question of the admission of women was brought up at this session, and again in the evening, at the Councillor's meeting, when it was indefinitely postponed.

WEDNESDAY, JUNE 14.

Dr. J. H. Robbins, of Hingham, presented a paper on *American Dyspepsia.* He believes that the great prevalence of dyspepsia in this country is the result of neurosal causes. He then went on to recite the various nervous conditions, such as worry, fright, anxiety, etc., that are known to produce dyspepsia.

A Study of the Action of Iron was the title of a paper read by Dr. C. H. Williams, of Boston. The results of experiments on animals inclines him to the belief that we have in iron, though not a dangerous element, yet a drug of more toxic qualities than is generally imagined. Iron should be given on a full stomach. The good following its use would seem to be due rather to its action in promoting digestion and assimilation than to the increase in the number of blood corpuscles, which is probably a result of the improved nutrition.

Dr. W. W. Gannett, of Boston, read the concluding paper of the session, and took for his subject *The Relation of Mould Fungi to Disease.*

The annual discourse was delivered by Dr. James P. Lynde, of Athol, on *Infantile Mortality; Its Causes and Prevention.* A vote of thanks was tendered Dr. Lynde.

OFFICERS FOR THE ENSUING YEAR.

President.—Alfred Hosmer, M.D., of Watertown.

Vice President.—J. H. Mackie, M.D., of New Bedford.

Treasurer.—Frank M. Draper, M.D., of Boston.

Corresponding Secretary.—C. W. Swan, M.D., of Boston.

Recording Secretary.—F. W. Goss, M.D., of Roxbury.

Librarian.—David H. Hayden, M.D., of Boston.

Orator for Anniversary in 1883.—Amos H. Johnson, M.D., of Salem.

Anniversary Chairman.—Francis H. Brown, M.D., of Boston.

The President introduced to the Society the President-elect, Dr. Alfred Hosmer, of Watertown.

The Society then adjourned to the Music Hall, where more than seven hundred Fellows dined and listened to after-dinner speeches.

The next annual meeting will be held in Boston, on the second Wednesday in June, 1883.

A Singular Case.

The Paris medical men, especially specialists in nervous diseases, are much interested, if not puzzled, by a patient recently received at the Beaujon Hospital. She was found by two policemen, insensible, on a seat in the Champs Elysées. At the station-house, Dr. Pinel was unable to restore her to consciousness, though he used every known means. She was in a state of ecstacy, her eyes wide open, and a smile on her lips. She remains mute; eats but little, and seldom. She is far advanced in pregnancy.

White Lead Factories.

We learn that the Gateshead (England) guardians have had their attention called to the condition of the employés of the white lead factories of the neighborhood. Decrepitude, palsy, blindness, and even death resulting from the lead poisoning. They will take steps to secure the introduction of machinery for the most injurious parts of the work. This is an example worthy of imitation in our own country.

Items.

—Sir Erasmus Wilson is improving very much in health.

—A Medical Students' Club has been organized in London.

—The next meeting of the Obstetrical Society of Philadelphia will be held September 7th.

—The meeting of the British Medical Association this month will celebrate the fiftieth anniversary of its foundation.

—Dr. J. S. Billings has accepted the invitation to deliver the annual oration before the Medical and Surgical Faculty of Maryland in April, 1883.

—Mr. Thomas Griffith, of St. Helena, Lancashire, England, who had been in practice there for twenty-one years, and who had been in the habit of taking chloral for the purpose of inducing sleep, accidentally took a larger dose than usual, with a fatal result.

—The eminent surgeon, Baron von Langenbeck, has tendered his resignation of the Professorship of Surgery in the University of Berlin, which he has held for many years with advantage to surgical science and honor to himself. His resignation has been accepted by the Prussian Government; and instructions have been given to take the necessary steps for the appointment of a successor, to enter upon the duties of the chair in October.

—A "Philanthropic Corps" has just been established by Herr von Madai, the President of the Berlin Police, composed of police officers and constables, a certain number of whom are chosen from the different police divisions. These members of the force are to attend weekly lectures at the Town Hall, on the treatment of invalids and sick persons suffering from sudden illness or accidents. It is expected that, shortly, about three hundred constables will, by these means, obtain sufficient knowledge of medical science to treat sufferers before regular medical aid can be procured. Attention will especially be directed to the best means of restoring life to persons taken from the water.

OBITUARY NOTICES.

Dr. William H. Studley, of New York, died of pneumonia, in that city, June 12th, ult. He was born in Bridgeport, Conn., February 21, 1827, graduated at Trinity College, Hartford, in 1850, studied in the Protestant Episcopal Divinity School there, was ordained by Bishop Brownell, but after two years' service in different parishes, owing to feeble health, determined upon a medical career. After a partial course at the Rush Medical College, Chicago, he received his degree from the College of Physicians and Surgeons, N. Y., in 1860. He was chiefly known as a contributor to some of the journals devoted to gynecology, and also as an inventor of some instruments of value. As a writer he was trenchant, lucid and original. As a debater he was always interesting.

QUERIES AND REPLIES.

J. W. C., in our issue of June 17th, is answered by a correspondent as follows: Give from five to eight drops of the tinct. iodine comp. in a wineglassful of water, three times daily, immediately after meals, uninterruptedly, during four weeks.

E. W. McG., Canada.—You can buy the articles you desire of any first-class drug store.

MARRIAGES

HARRIS—HURD.—In Fayetteville, N. Y., June 15th, 1882, by Rev. John C. Hill, Dr. Ira Harris, and Miss Ara, only daughter of the late D. E. Hurd, M. D.

WALLACE—ADAMS.—On Wednesday, May 3d, 1882, by Rev. H. J. Turner, at the residence of W. T. Chapman, H. C. Wallace, M.D. and Miss Mary A. Adams, all of Randolph, Tenn.

THE

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Original Department.

Lecture.

CERTAIN ACCIDENTS OF BRIGHT'S DISEASE.

BY M. DIEULAFOY,
Prof. Agregé of the Faculté de Medécine de Paris.

Polyuria or Pollakiuria.

Gentlemen:—Among the troubles observed during the evolution of Bright's disease there is one to which I desire especially to call your attention; this is the frequently recurring desire to pass water, amounting in some cases to a veritable incontinence of urine. There are patients with chronic nephritis, who are obliged to urinate ten or twelve times during the night, thus inducing persistent insomnia. I have myself observed cases where the patient was obliged to pass water fifteen or twenty times daily, and two women in my service suffered from an almost constant desire to urinate.

But it must be understood that this frequent micturition is not due to the secretion of an exaggerated quantity of urine. There are certain diseases, glycosuria and diabetes insipidus, for instance, in which the patient urinates frequently, because there is a large secretion of urine; in certain cases of Bright's disease, also, the secretion is so exaggerated as to induce frequent micturition; but at present I intend to take into consideration only those cases where the frequent micturition is independent of the amount of urine secreted, sometimes coinciding with an abundant secretion, and at others accompanying a secretion which does not amount to a few hundred grams in the twenty-four hours.

There is, then, in Bright's disease, two distinct and independent urinary symptoms; the first, which I will not at present speak of, being a trouble of secretion, polyuria, and the second, which I will consider in this lecture, is characterized by the frequently recurring desire to pass water. Although these differing urinary troubles have been perfectly distinguished by contemporary authors, Jaccond (Traité de Pathologie Interne, vol. 2, page 417), Lecorché (Traité des Maladies des Reins, p. 387), and Rosensteim (Traité des Maladies des Reins), they are yet too often confounded together and considered under the designation polyuria, which is incorrect, as polyuria simply refers to a trouble of secretion. Frequent micturition constitutes, I repeat, an independent symptom, having its own special value and importance; it becomes, then, necessary to confer on it a special designation, and I propose the denomination pollakiuria (from πολλαχις, often). The term polyuria will then serve to designate an abundant secretion, while pollakiuria would signify a frequent call to urinate.

Brightic pollakiuria may come on very early or very late in the course of the disease, and in some cases is associated with pain. Precocious pollakiuria is that which accompanies the primary symptoms of Bright's disease; it is associated or not with epistaxis, cephalalgia, albuminuria, attacks of dyspnœa, polyuria, cramps in the muscles, œdema of the face and extremities, and troubles of sight and hearing; all symptoms which may appear singly or be associated together at any period of the evolution of the malady. Here is an example of pollakiuria appearing at the début of the disease:—

M. Y. complains of violent headache for the past two months; he has slight epistaxis just after rising in the morning. For the past few days he passes water very frequently, although the quantity of urine is not increased; he is obliged to rise four or five times during the night to evacuate the bladder. He recalls having had another such attack about two years since, with pollakiuria and slight epistaxis, so that his malady dates back two years, at least. Since that time he has been troubled from time to time with lumbar pains, which he considered an attack of lumbago, violent headache, slight troubles of audition, and attacks which he considered of asthmatic origin, but as these symptoms did not at any time last long and were not of great intensity, they gave him no great anxiety.

What troubles him most at present is the pollakiuria; there is no polyuria and the urine contains but five grains of albumen per quart.

In a few cases pollakiuria is an isolated symptom, appearing as the initial sign of commencing Bright's disease; nevertheless, careful examination will generally reveal other symptoms, not at all prominent, it is true, but which will permit us to affirm the existence of Bright's disease. In the following observation this species of pollakiuria was well marked: Mme. D., fifty-two years of age, complains, for the past six months, of very frequent calls to urinate, particularly during the night, passing each time but a small quantity of urine, for the entire amount passed during the twenty-four hours does not exceed forty ounces.

There is, then, pollakiuria without polyuria. The analysis of the urine gives but traces of albumen.

The symptom pollakiuria is so marked in this case that it appears as the unique and initial sign of commencing Bright's disease. But after careful questioning we find that she has had on several different occasions ringing in the ears, and that hearing is much enfeebled in the left ear. She has had slight epistaxis, cramps in the limbs, and frequently itchiness of the skin over the left arm and forearm. A slight bruit de galop is heard on auscultation of the heart.

The first analysis of the urine, made by M. Yvon showed exceedingly slight traces of albumen, six drachms of urea per quart, with a density of 1.020, the urine being slightly acid. A second analysis, made nine months later, gave three grains of albumen per quart, with four drachms of urea and a density of 1.019.

In other cases pollakiuria appears very late in the course of the disease.

Mme. G. had, in the course of December, 1879, a very grave attack of scarlatina, accompanied or complicated with nephritis and albuminuria. M. Weber, who had care of Mme. G. during the attack of scarlet fever at Amelie-les-Bains, several times examined the urine, and has kindly furnished me with the data of the case at that period.

After the first acute period, characterized by generalized anasarca, with albuminuria, attacks of dyspnœa, etc., Mme. G. experienced a notable amelioration, and for three months traveled on the continent, believing herself completely cured. But very soon after the acute period succeeds the insidious and latent course of the chronic disease. Arriving at Paris during the month of March, the patient commences to suffer from pollakiuria, and is obliged to rise twelve or fifteen times during the night to evacuate the bladder, which causes a veritable state of insomnia. The urinary secretion is below the normal average.

The patient complains of great pain in the left lumbar region, a creeping sensation (fourmillements), with numbness of the fingers, nausea and cephalalgia. There is slight localized œdema of the foot, the leg, and the left lumbar region.

Analysis of the urine shows a very acid reaction, a density of 1.028, with five drachms of urea per quart, and bnt slight traces of albumen. The milk diet is not well tolerated; she takes hardly a quart of milk per diem. The micturitions are very frequent, but the secretion of urine is so much below the normal that there is not a pint in all for the twenty-four hours.

Soon after very grave nervous symptoms supervened, the urinary secretion was entirely suppressed, and there was violent cephalalgia, accompanied with somnolence and torpor.

I will not insist on the other peculiarities of this case. I wished only to call your attention to the symptom pollakiuria, and demonstrate to you that it coincided, in this case, with a gradual fall in the quantity of urine secreted.

In certain cases, particularly among women, the pollakiura is painful. Two of the patients in my service have presented this peculiarity. The first, who succumbed through the progress of the disease, was, at the same time, affected with phthisis and Bright's disease; the autopsy revealed the lesions of mixed nephritis; the other is at present under observation. With both these patients pollakiuria was excessive; the calls to pass water recurred constantly, and this symptom was prominent from the beginning of the malady. The quantity of urine passed at each micturition was very small, at most a

teaspoonful, and each time pain followed, not at the moment of emission, but just afterward. This pain was very acute and had all the characters of a spasm; it was due, probably, to painful tenesmus of the neck of the bladder, a spasmodic condition of the sphincter muscle. The pain generally lasted several minutes, and reappeared after each micturition.

The few illustrations I have given suffice to prove that polyuria and pollakiuria are independent urinary troubles; polyuria is a trouble of secretion, the kidney being the organ affected, while the other, pollakiuria, is a trouble of excretion, due to vesical derangement. It is even remarkable that in Bright's disease the troubles of excretion often precede those due to disorders of secretion, and the frequent call to urinate may appear a long time before any exaggeration in the quantity of urine secreted.

Pollakiuria is due to exaggerated excitability of the vesical mucous membrane or of the muscular coats of the bladder. When the muscles of the body of the organ are affected, pollakiuria supervenes sooner or later, with more or less urgent calls to urinate; when the vesical sphincter is the cause of the frequency of micturition, the act is often followed by more or less prolonged and painful spasm.

As regards the cause of these troubles of the organs of excretion when the apparatus of secretion alone seems affected, it is impossible to form an opinion. Are these symptoms due to modifications in the composition of the urine itself I do not think so, for the symptom pollakiuria often supervenes at the début of the malady when examination of the urine reveals nothing abnormal. Can they be due to reflex action having origin in the kidney and affecting secondarily the bladder? This is possible, but there is no proof, and, in fact, the vesical symptoms often appear at a period when the renal lesions are as yet far from apparent.

For that matter, the indecision we feel in attempting to explain the vesical symptoms of Bright's disease is not at all surprising, for the same difficulty exists with other organs whether the symptoms affect the heart or the liver, or consist simply in œdema. But although the pathogenesis be yet far from elucidated, the clinical study is not the less interesting, and some elements to aid diagnosis may be drawn therefrom.

In effect, in presence of a patient suffering from pollakiuria and yet presenting none of the lesions which ordinarily give rise to frequent micturition, such as calculus, hypertrophy of the prostate gland and vesico-prostatic tuberculization (Guyon), we should consider the possible début of Bright's disease. And if the patient be then very carefully examined, certain other symptoms of the disease, perhaps but slightly marked, may be elucidated.

For a long time my attention has been devoted to the modes of evolution of Bright's disease. With the exception of a few cases where the origin and début of the malady are clearly indicated, as in scarlatina and certain cases of acute epithelial nephritis; with such exceptions it has seemed to me in a great number of cases of Bright's disease it is very difficult to fix precisely the period of development, and the pathogenesis is oftener still more obscure. In 1827, when Bright wrote his remarkable memoir, it required all his great talent of observation to create the morbid entity which bears his name.

This pathological entity was based clinically on the presence of œdema accompanied by coagulable urine. But these principal symptoms are often wanting and do not supervene until an advanced period of the malady. I have on several occasions been convinced that cases regarded as nephritis of sudden onset and very rapid course were, in reality, cases of nephritis of slow evolution, during the course of which an acute attack supervened. An individual consults us, stating that his health has been considered good up to within a few days or a few weeks. Now he suffers from lumbar pains, attacks of dyspnœa; his face is slightly puffed, there is some œdema of the feet, and the urine contains albumen in slight proportion.

At first this would appear to be a case of acute nephritis of a few weeks' duration; but if the patient be carefully interrogated as regards the state of his general health previous to this acute period, it will be found that he has suffered from frequent headache, that for the past two years he has had attacks of pollakiuria and cardiac palpitation. That from time to time he had slight epistaxis in the morning, ringing in the ears and diminution of hearing capacity, and other symptoms apparently of slight value, which will serve to show that the evolution of the malady has been going on for several years before the acute attack supervened. We do not, consequently, at present, wait for œdema and albuminuria to affirm the existence of Bright's disease.

Œdema appears very late in certain forms of nephritis, and albumen may be a long time wanting or disappear entirely from the urine at times. So that, in order to arrive at a correct

diagnosis when these two principal signs are wanting, the other symptoms should receive careful attention. In a doubtful case an abnormal heart sound (bruit de galop de Potain) removes all uncertainty as regards diagnosis. The auditory troubles of Bright's disease have not as yet received the attention they merit, but the ocular troubles have drawn considerable attention, and ophthalmoscopic examination may prove invaluable in a difficult case. I need not point out the value of early diagnosis, as therapeutic interference has most efficacy when commenced at an early period of the disease.

Communications.

REMARKS ON SOME OF THE DISEASES OF THE EYELIDS.

BY C. H. BROWN, M.D.,
Of Lancaster, Pa.

The eyelids may be considered as parts of the general integument, but as having undergone certain modifications to fit them for the purposes they are intended to subserve in the economy. In accordance with this view, the different affections of the lids are only repetitions of those diseased conditions which are constantly occurring elsewhere on the skin. And as these latter diseases, with some exceptions, are often successfully treated by the general practitioner, without referring them to a dermatologist, so, with the same reservations, may the diseases of the eyelids also be treated, and just as successfully, by the general physician; thus obviating the necessity of recourse to the oculist. This is a great advantage to the physician, not only because it enables him to pocket the fee which would otherwise go to the specialist, but because it is a great satisfaction to be able to cure these troublesome diseases, as many of them are, and it gives the physician so much better standing in the eyes of his patients and of the community.

But many physicians fall into the opposite error; instead of sending all their eye patients indiscriminately to an oculist, they attempt to treat all such diseases themselves, whether the trouble be simple or severe; and although some cases certainly recover under their treatment, many others have their sight irreparably damaged by unskillful treatment, and finally are compelled to seek a specialist's advice, only to find that it is too late. This is especially the case in affections of the cornea and iris; the patient applies to his family physician, who, after a superficial examination, sees that the eye is red and watery, and immediately prescribes an astringent wash. Now, while astringents are used with the happiest effect in the treatment of conjunctival affections, they are, on the other hand, highly productive of mischief when the cornea or iris is inflamed, and corneal and iritic diseases are thus stimulated to a state of severity that is seldom attained under other conditions. The physician, thinking the severity of the disease is due to an aggravated form, perseveres in the use of his nitrate of silver or some other equally astringent collyrium, or even increases the strength of it, until finally the eye succumbs to the combined assault of the disease and the remedy, and its usefulness is entirely destroyed, unless the patient, before this stage has been reached, in sheer despair, makes a change of physicians. In the case of iritis, the iris is bound down to the lens by extensive synechiæ, which condition is one of serious import; and in the case of keratitis, the cornea becomes perfectly cloudy and opaque.

It has fallen to my lot recently to see a number of such cases; the damage had been done, and in many of the cases I was unable to hold out any prospect of bettering the condition of their eyes. Although it was unpleasant to hear some of them denounce their physician, and in very emphatic terms, yet the question arises, are the physicians blameless?

In the May, 1881, number of the *American Specialist*, in an article headed, "The Consequences of Neglect in the Treatment of Eye Diseases," I related the history of several cases where the loss of sight was distinctly traceable to neglect and wrong treatment by the attending physician, and where, in all probability, the sight could have been saved by proper treatment.

It is selfish and unprofessional for a physician to treat every case of eye disease that comes under his care, whether he understands the nature of the diseased process or not, in view of the damage that is possible under improper treatment. It would be much safer for both physician and patient, safer for the physician's reputation, and safer for the patient's eyes, if all eye cases were immediately turned over to an oculist. But these are the extremes, and the judicious and conscientious physician may be able to strike a happy mean; to treat some cases with satisfaction to the patient, and credit to himself; and in other cases, with equal satisfaction and credit, refer the patients to a competent ophthalmologist.

These are important truths, and cannot be too often repeated, but the further consideration of this subject does not properly come within the

scope of this article, which is intended, simply, to refer to those diseases of the eyelids which the physician may safely and successfully treat.

Hordeolum—Stye.

One of the most frequent and unpleasant of the diseases of the eyelids (especially unpleasant if it occurs in one's own person), is a stye. Stellwag says ("Treatise on the Diseases of the Eye," by Dr. Carl Stellwag), "stye is a swelling of a tarsal gland, which is filled with a substance resembling pus, and occurring with inflammatory symptoms." Wells says (Treatise on the Diseases of the Eye," by J. Soelberg Wells), "this disease is not, as is sometimes supposed, an inflammatory affection of the meibomian glands, but is a furuncular inflammation of the connective tissue of the lids, having its seat, generally, in the vicinity of the hair follicles and near the margin of the lid." Which of these two authorities is correct, is not for me to decide, but for myself, I prefer to regard a stye, as Wells describes it, as a furuncular inflammation of the connective tissue of the lids.

Every one is familiar with the appearance of a stye. Beginning as an apparently harmless pimple, it soon develops a more or less angry inflammation, and passes through the ordinary stages of suppuration and discharge. In some cases there may be a good deal of feverishness and constitutional disturbance; but even if there is not, the patient feels disinclined to perform his ordinary duties, and can only use his eyes with considerable discomfort. The swelling, too, causes a good deal of disfigurement, and sometimes is sufficient to close the eye.

In the *treatment* of this troublesome affection, it is well to remember that a stye can seldom be "backed," that is, the disease seldom undergoes resolution; and the trial of various measures for the prevention of suppuration by the application of cold compresses, etc., is simply a loss of time and prolongation of the trouble. And, therefore, I consider the early application of hot poultices as *the* treatment. These poultices should be changed frequently, as often as every fifteen or twenty minutes, and thus the stye is hurried through its various stages, and often brought to a head in the course of ten or twelve hours. I usually order the ground flaxseed to be mixed with a dilute solution of sugar of lead, or have a few drops of the lead solution sprinkled over the poultice at each renewal, as the lead serves to allay the scattering inflammation and to concentrate it.

It is a mistake to pick at the stye with needles, to see if matter has formed; this, almost invariably, aggravates the trouble. The physician should wait until he is sure of the existence of pus, that is until the skin has become thinned and the apex of the swelling presents an unmistakably grayish-yellow tint; then a small incision should be made, to permit of the ready escape of the pus, and pressure should be made along the edge of the lid, toward the opening, so that the contents of the swelling may be thoroughly evacuated, and then in many cases the stye is practically well. After the incision, the inflammation always rapidly diminishes, the pain, which may have been quite severe, abates, and any further trouble from the hordeolum is scarcely to be feared, or perhaps the swelling may have opened spontaneously, in which case there remains nothing for the surgeon to do but to make the opening more complete and to fully evacuate the contents of the swelling by pressure.

Very frequently, however, a stye on the lower lid is followed by one on the upper lid, and the disease shows a great tendency to recur again and again, so that it would seem as though some individuals and some constitutions were especially liable to it. It is said to occur most frequently in persons of delicate health, and doubtless is an indication that one's system is below par.

It is in these cases that most authorities advise the use of tonics; but of all the remedies that have been recommended in this condition I think that lime is decidedly the best. It seems to have a specific influence over those cases of inflammation of cellular tissue which terminate in suppuration. Given a case in which boils are being continually developed, the use of lime will effect a radical cure. It may be given in the form of lime water, in doses of a wineglassful three or four times a day; or in the form of calcium sulphide, which is perhaps the preferable form, in doses from of $\frac{1}{10}$ to $\frac{1}{4}$ grain three or four times a day. In prescribing the sulphide I order the pills or granules in preference to powders or a solution of the remedy, as I find in the latter forms it deteriorates rapidly.

Blepharitis.

Perhaps the most important of the diseases of the eyelids, very common among hospital patients and the lower classes, is one which has received a great variety of names. It is an inflammation of the edges of the lids, and it has been called tinea tarsi, ophthalmi tarsi, blear eye, blepharitis marginalis or ciliaris, etc. Blepharitis is perhaps the term most often used, and it serves very well to express the nature of the disease.

In the mildest forms of the disease we notice only a reddened and slightly thickened condition

of the edges of the lids; there is at the same time a feeling of heat and itching in the eyes, which is aggravated by exposure to a bright light and by long continued use of the eyes on fine work. This is a condition that is quite common, and is found in connection with many eyes that are not considered weak, and whose owners never apply for treatment.

In a little more severe form of the disease we find the lids red and glazed, and perceptibly thickened. On awaking in the morning the patient finds that the lids are stuck together, and that small crusts have formed upon the lids and around the lashes, which are stuck together in little bundles by the hardening and drying of the discharge. The lashes become loose and fall out. For some time new lashes are formed, but are more likely to be stunted and crooked than of normal growth. If, however, the disease is severe or protracted, the lashes to a great extent cease to grow, and the lid presents but a few thin, straggling cilia sparsely scattered along its margin.

Marginal blepharitis seems especially apt to occur in persons of feeble health or of scrofulous constitution, and in such cases it proves very obstinate and prone to recur, even after an apparent cure. Indeed, some authorities consider this disease nothing more or less than an eczema attacking the margins of the lids. ("A Practical Treatise upon Eczema," by Dr. McCall Anderson, page 197.) Blepharitis is, in its nature, an essentially chronic disease, and may last for months and years. In some cases it is an habitual disease, sometimes better and sometimes worse. It seems scarcely necessary to give a further or fuller description of the disease, as it is usually easily recognized, and its appearance is familiar to most physicians.

In the *treatment* of blepharitis the greatest attention must be paid to cleanliness. In its early stages, before there is serious involvement of the hair follicles, and before the lids are distorted by the shrinkage of the inflammatory effusion, the disease is amenable to treatment. It is, however, very necessary to lay bare the seat of the disease by the complete removal of the crusts, and to apply the remedy to the diseased follicles with sufficient perseverance.

It is related of Sydney Smith that he once saw a little girl playing with a tortoise, and in order to please the animal, patting it on the back. He stopped to speak to the child, being amused at her futile efforts to make friends with the animal by patting its insensible shell, and explained to her the uselessness of her proceeding, and told her that she might as well pat the dome of St. Paul's, for the purpose of pleasing the Dean and Chapter. To make a practical application of this incident, it would be equally useless and absurd to attempt to cure blepharitis by applying remedies to the outside of the crusts.

Simple water will not readily remove these crusts, on account of their greasy character; neither should they be roughly pulled off before being thoroughly softened, as thus the parts beneath are often excoriated and made to bleed. The most satisfactory way of removing these crusts is by the use of a warm alkaline lotion. I usually employ a weak solution of either bicarbonate of sodium or of borax, which I direct to be applied by means of a small sponge or soft rag. The edges of the lids should be thoroughly soaked with this solution until the crusts are softened sufficiently to permit of easy removal. When this has been accomplished, it is well to pass the lashes gently through the fingers, so as to remove all that are loose, instead of allowing them to remain as irritating foreign bodies.

We are now in a position to apply the remedy, and this is perhaps best applied in the form of an ointment. The favorite ointment used in these cases is known to ophthalmic surgeons as Pagenstecher's, its active ingredient being the precipitated yellow oxide of mercury, and the formula would be something like this:—

℞.	Hydrargyri oxidi flav.,	gr. x–xx
	Balsam Peruv.,	ʒ ss–ʒ j
	Vaseline,	℥ j.
M. Bene.		

It is sometimes difficult to get druggists to rub this up as thoroughly as it should be done, and physicians should be explicit in their directions on this point.

Another favorite prescription of mine, and one which patients like very much, because it is not irritating, as the yellow oxide is, if it gets into the conjunctival sac, as it is almost sure to do, is:—

℞.	Acidi boracic,	gr. xl–ʒ j
	Vaseline,	ʒ ss.
M. Bene.		

Either of these ointments may be applied to the edges of the lids by means of the tip of the finger or by the use of a camel's hair pencil. If applied at night, it is allowed to remain until the next morning, when it is washed off with the alkaline lotion mentioned above. If this line of treatment is faithfully carried out, improvement is usually manifest in the course of a few days.

It is surprising to one who has never had his attention called to the subject, how many cases of blepharitis are caused and kept up by refrac-

tion errors. It is almost invariably the rule for me to examine the state of the refraction when a case presents itself of this kind, and I generally find some hypermetropia or astigmatism. I have cured many cases of blepharitis with no other treatment than the necessary correcting glasses, after they had been treated elsewhere by lotions, collyria, and ointments, without number. A very interesting and instructive paper might be written on this subject of the relation of refraction errors to inflammations of the lids. It would, therefore, be advisable in all cases where the above indicated line of treatment fails, for the physician to send his patient to the specialist to have the state of refraction examined.

Strumous Ophthalmia.

The physician is often called upon to treat cases of strumous ophthalmia, children of a strumous habit, who suffer with sore eyes, and perhaps other evidences of scrofula, but in which the unpleasant condition of the eyes is the most prominent symptom. The lids are red and swollen, with numerous and frequently recurring minute pustular collections about the lashes, with some conjunctivitis and photophobia, etc., not only giving the eyes a very unpleasant appearance, but also preventing the patient from using them with any degree of comfort.

In these cases, in addition to the local treatment as sketched above, the internal use of sulphide of calcium is almost a specific. The good effects resulting from the use of sulphide of calcium in scrofulous sores, suppurating glands in the neck, and similar affections occurring in connection with this strumous diathesis, have been known for some time, this use of the remedy having probably been brought to the attention of the profession by Dr. Sydney Ringer; but it is of more recent date that it has been recommended in cases of blepharitis and strumous ophthalmia.

I have employed it in a number of cases and with very satisfactory results; and, although my experience with it has not been sufficiently extended to be able to express a decided opinion, yet I feel that this remedy is destined to be a valuable one in the treatment of this class of cases. The testimony of others as to its efficacy is being gradually collected, and sulphide of calcium is assuming a high place in the therapeutics of strumous ophthalmia, blepharitis, phlyctenular keratitis, etc.

Of course, there are some cases it will fail to cure, but it often happens that the exception proves the rule. There are some cases of ague that quinine fails to cure, and yet no one doubts the value of quinine in the treatment of ague. But even though there are some cases of strumous ophthalmia that sulphide of calcium will not cure, yet I think it cannot fail to be at least of partial benefit in every case, so that it should always be given a fair trial.

The consequences of blepharitis are many and interesting: Trichiasis and distichiasis (in which the lashes turn in and rub over the eyeball); entropium and ectropium (in which the free edge of the lid is respectively inverted and everted). These diseases all call for surgical interference, and need not be considered here. I desire here to place on record the history of a case of one of the more unusual sequences of blepharitis, viz., madarosis, in which the edge of a considerable portion of the lid is completely deprived of lashes, a condition which is usually considered incurable.

A Case of Complete Madarosis of the Upper Lids.

E. S. J., a student, aged 18 years, gives the following history: In the spring of 1878 his eyes were very sore. No physician was called, but the inflammation was treated with domestic remedies. He remembers that his eyes were tied up, that he was kept in a dark room for some days, and that the eyelashes came out very freely. In a short time, however, his eyes recovered from this inflammation, the only sequel being the entire absence of lashes from both upper lids—a condition of complete madarosis.

In the following year he suffered somewhat from symptoms of asthenopia, and applied for treatment at the Eye Dispensary of the University Hospital in Philadelphia. No notice was taken by the physicians there of this condition of baldness of the upper lids, nor did the patient himself call attention to it. A convex glass for R. E., and a convex-cylindrical glass for L. E. were prescribed for him, which he was instructed to wear constantly, and which he did, to the relief of his asthenopic symptoms.

During the summer of 1881 he again commenced to suffer with the same symptoms of asthenopia, and soon after he came under my care, complaining that his glasses did not suit him any more, neither for distance nor for reading. Complains of burning pain, double vision, etc., after reading a short time. He comes to me desiring to know whether I cannot give him a better pair of glasses; and it was while examining the state of refraction of his eyes (under atropine) that I discovered this condition of the upper lids.

On questioning him he said that he felt the need of the lashes very much; he felt that his eyes were not adequately protected. He experi-

enced the most inconvenience in windy weather, when, on account of the loss of the lashes, particles of dust and dirt would get into his eyes, in spite of his best efforts to keep the lids closed. He also felt that his eyes were not sufficiently protected against a very bright light. Also complains of a constant burning pain along margins of upper lid. On inspection, I could see several black points, showing the situation of the hair follicles, and on passing the point of my finger along the edges of the lid, I could just detect the faintest trace of roughness. There was no other abnormal manifestation, no thickening of lids, no blepharitis, no trichiasis or distichiasis, no entropium or ectropium.

Inasmuch as this condition had now existed for more than three years, I did not have much hope of bettering it. In fact, the patient did not apply for treatment for that condition, but only to have his glasses changed and made more comfortable. However I gave him the following prescription, and asked him to apply it freely to the margins of the lids every night:—

℞.	Hydrarg. oxid. flav.,	gr. iij
	Balsam Peruv.,	♏xij
	Vaseline,	ʒij.

M. Bene.

In less than two weeks' time I was gratified to find that the lashes had commenced to grow; and five weeks after the commencement of the treatment, which was the last time I saw the patient, the lids were provided with lashes of normal length, except for about a space of two lines just in the middle of each lid. He said that his eyes felt much more comfortable since the lashes had grown out, and that he could now protect his eyes from dust and light, but still had the burning pain just at the spot where the lashes failed to grow.

I might say that the glasses I prescribed for him were—

O. D. + 1.75
O. S. + 1.75 s ⊂ —.50 cyl. axis 180°

which proved entirely comfortable, relieving his asthenopic symptoms, and sending him back to his studies again.

Pulvis Kino Compositus in Influenza.

Dr. G. A. Hawkins Ambler says, in the *Lancet*, that he has derived much benefit from the use of the pulvis kino comp. in catarrh. He used it as a snuff. The discharge was stopped in a few minutes, and though it recurred later on, a repetition of the snuffing process was again most effectual, and the following morning all symptoms had disappeared.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF D. HAYES AGNEW, M.D.,

Professor of Surgery and of Clinical Surgery in the University of Pennsylvania.

Reported by Wm. Morrison, M.D.

NECROSIS OF THE TIBIA—ABSCESS OF THE PHARYNX—UNUNITED FRACTURE OF THE NECK OF THE FEMUR—NECROSIS OF THE FEMUR—DOUBLE HYDROCELE—GONORRHŒA—SUPPOSED FOREIGN BODY IN THE TRACHEA.

Gentlemen:—The first case which I have to show you is one of necrosis of the tibia. The tibia is very frequently attacked by necrosis, as is also the femur. The tibia is more exposed than the femur, in consequence of a large portion of it being subcutaneous, so that contusions or blows received upon this part of the bone are liable to set up a slight periostitis, which may involve the bone. The femur, as I have said, is also frequently the subject of necrosis. There the bone is not so much exposed to injury, and I think the disease in many cases, especially those in which there is no constitutional explanation, is due to the fact that the bone is surrounded by muscles of great power, which strip the periosteum from the bone.

(The patient, a young man of about 25 years of age, then stated that the trouble came on suddenly, when he was seven years old. The limb had never been injured. He awoke one morning with a pain in his leg. He was operated on three years ago, but with no benefit. The wound made by the operation did not heal.)

I shall now introduce a probe through this sinus. It has now passed through the external shell of bone and is now on the denuded surface. I am trying to determine whether or not the bone is loose, for until the sequestrum is loose the operation should not be performed. If you operate before it is loosened, you are unable to tell where the dead tissue ends, and the very damage that you do in separating the diseased part is apt to cause a renewal of the inflammation in the sound portion, and another installment of bone goes down. It is better to leave the work, as far as possible, to nature. You have then only to cut through the new bone and remove the sequestrum.

I cannot impart any motion to this bone. I could, of course, cut down and remove all that appeared to be diseased, but I should probably have to repeat the operation. I think it wiser, therefore, to wait. If this man will wait for three months, or perhaps longer, he will lose no time. A man with a limb of this kind can go about and follow his occupation with comparative comfort. One trouble of which he complains is nocturnal pains coming on when he is warm in bed. These are perhaps due to accumulation of blood in the bones during those quiet moments when the blood leaves the surface of the body and goes to the internal organs. During the daytime the capillary circulation is active, there is a large amount of blood forced to

the surface, but at night this peripheral circulation diminishes, the vessels collapse, the blood accumulates in the internal organs and the bones, and the pressure on the nerves causes pain.

Abscess of the Pharynx.

Here is an interesting case. This colored man was attacked four weeks ago with a swelling inside of his throat, accompanied with difficult deglutition—a desire to swallow, but an inability to do so; when he made the attempt to swallow fluid it would be returned, showing that there was some obstruction, some swelling encroaching upon the pharynx, causing a certain amount of reflex irritation, so that when an attempt was made to swallow, this disposition to reject the fluid was noticed.

Looking in his mouth you will see a soft swelling, occupying the lateral wall of the pharynx, just posterior to the last molar tooth. In addition, you will find on the outside of the neck a swelling corresponding to the group of glands occupying the sterno-cleido mastoid region. You also notice that there is a marked pushing out of the carotid artery, the pulsations of which I can easily feel. There is also marked distention of the temporal and external jugular veins, indicating that there is some pressure upon the venous trunks. Again, looking in his mouth, you see two teeth, the posterior one diseased and broken down, and the anterior one in a similar condition.

Frequently you will have trouble in this region following the eruption of a wisdom tooth; coming out late, the dental arch being filled, there is no room for it, and, in consequence of the difficulty in making its escape from the alveolus and the gum, there is produced an inflammation extending forward and backward. This frequently leads to abscess. There is no history, in this case, of difficulty with the teeth, but these decayed teeth may have something to do with the swelling. All growths commencing in this region, and soon implicating the glands on the outside, are suspicious. They are apt to be malignant in their character, and looking at this swelling, the first impression would probably be that it was an affection of this character; but when we consider the history, that it dates back only four or five weeks, and has been accompanied by conflicting phenomena, its benign character is rendered probable. When I press upon the swelling I find that it is not firm, that it is elastic, an elasticity that is always deceptive. It may be elastic from purulent matter, from serum, or from granulation tissue underneath. This elasticity is common in malignant disease. When I press on the inside and make counter pressure on the outside, I find that there is certainly a communication between the two swellings. When there is a question as to the character of a swelling, and when there is reason to believe that it is not malignant, it is always wise to make an exploratory puncture. Just before the lecture I introduced a grooved needle into this swelling, and I found, not blood, as we should have expected if it were a malignant affection, but pus, showing that it is an abscess in the lateral wall of the pharynx.

The proper treatment is to lay this abscess open, but whether or not there is anything behind this can only be determined from future observation. (The abscess was then laid open with a bistoury, and a large amount of pus escaped.)

It would have been impossible to decide with absolute certainty as to the nature of this affection without the exploring needle.

This man should have his decayed teeth removed as soon as possible, as they have been the cause of this condition of affairs.

Ununited Fracture of the Neck of the Femur.

This man says that three years ago he received an injury on the hip, and has not been able to do any work since. He says that his right leg was broken. Looking at his legs, we see that the right is not as large as the left, but this may be from want of use. Placing the limbs together, we see that the right leg is shorter than the left. Measuring from the anterior superior spinous process to the lower extremity of the malleolus, on each side, I find that there is an inch and a half of shortening.

When I attempt to turn the sound limb out, there is a good deal of resistance, but there is scarcely any when I attempt to turn the affected limb. The trochanter major, on the affected side, is one inch nearer the superior spinous process than on the sound side. There are only two ways in which this can occur, one by fracture through the neck of the bone, the other, by absorption of the neck of the bone. There is a crepitus here which is, I think, the crepitus of an ununited fracture, although at this distance of time we must be very cautious in saying to what the crepitus is really due. Now, when he walks the trochanter slips up as soon as he puts his weight on that leg. An ununited fracture of the neck of the femur necessarily interferes with walking, unless supported by a cane or a crutch; but with the assistance of a cane, he ought to be able to walk with comfort. The trouble with this man is that he has not tried enough. This man can, I have no doubt, walk a great deal better than he has done to-day.

This occurred three years ago. He was then only 47, and had not reached that period at which we usually have fractures within the capsule, although I have seen them at the age of 45 years and at 50. If this were a case of intracapsular fracture we should not expect union, but if it were extra-capsular there ought to have been consolidation.

Necrosis of the Femur.

This lad is a German; age, 9 years. His disease is of one year's standing. We have no history of the case, but, as we see, he has disease of the right thigh bone. The thigh is very much enlarged, and there is a sinus which, I doubt not, leads down to diseased bone. There is also distortion of the limb and considerable shortening.

The first thing we want to ascertain is, whether this is a case of hip-joint disease and the present trouble is secondary to it, or whether it is primary disease of the femur. Without any examination I am of the opinion that it is simply disease of the bone; but in order to satisfy myself I flex the thigh and move it in various directions, and I find that there is no movement communi-

cated to the pelvis. There is no doubt, then, as to its being disease of the femur. The probe reveals dead bone. From this scar on the front of the femur I presume he has been treated with the actual cautery, a practice of little use in this disease.

In a lad of this age separation of the sequestrum takes place more quickly than in the adult. It has very likely reached a stage when it would be proper to remove it. We shall take him into the house and operate at some subsequent period.

Double Hydrocele, Gonorrhœa.

This young man has had these swellings in the scrotum for two years; that on the left side being the larger. They have been examined by transmitted light and found to be translucent. We have, therefore, a case of double hydrocele. He also has a clap; has had it for about a week. He does not want the liquid removed, and you will find, as a rule, when the accumulation is not more than this, and when the tumor is not of sufficient magnitude to cause inconvenience, that the man may go for five or six months longer without the operation becoming necessary.

The operation is simply puncturing the sac and allowing the fluid to escape, or, if the radical operation is desired, injecting into the sac, after the removal of the liquid, a little stimulating fluid, as the tincture of iodine.

What is of more importance to him is, I think, the cure of this urethritis. It is a specific urethritis, and balanitis, for it extends not only over the head of the penis, but also over the prepuce. The discharge began only three days ago. It is therefore young. The best treatment would be an injection of sulphate of zinc gr.j. to water f ℥j. thrown into the urethra three times a day, holding the orifice of the urethra around the nozzle of the syringe, retaining the injection inside of the canal for five minutes, at the same time rubbing the under surface of the penis with the hand, so as to distribute the injection over every inequality of the membrane. This is strong enough for the first two or three days. After four or five days the strength may be increased to three grains to the f ℥, and if necessary you can go up to five grains, but it is usually not necessary to go beyond three grains. This will cause the discharge to disappear in the course of ten days. There are certain drugs, as copaiba and cubebs, which may be given internally and will facilitate the cure. Ten minims of the balsam of cubebs or copaiba, in capsules, may be given four or five times a day. I am in the habit of making the injections of the maximum strength at once, and then let the patient reduce the strength by water, as required. This makes the expense to the patient much less.

Supposed Foreign Body in the Trachea.

A mother has brought her daughter here under the impression that there is a breastpin in her throat. An attempt, it is said, was made to extract it, and there is a cicatrix in front of the trachea where the incision was made. Mistakes are very easily made in regard to foreign bodies in the air passages, and you should be certain of their presence before resorting to so serious an operation.

She gives the following history: "She is 15 years old; three years ago she swallowed an old fashioned cuff button with a pin about an inch and a half long attached; she had it in her mouth when she threw her head back and laughed and the pin slipped down. The operation was performed six weeks later. Since she swallowed the pin she has had a little cough.

On ausculting her chest I find some moist râles, but not such as you would expect, if there were a body of this size in the trachea. She has never had any violent spasms threatening suffocation. Of course, it is difficult, to say with absolute certainty that there is not a foreign body in the air passage, but I am of the opinion that there is not, because when a body is so situated there is generally, after a time, a profuse discharge and accumulation of mucus in the bronchial tubes, and the whole lung is filled with moist râles. to which signs may be added violent paroxysms of cough and impending suffocation.

Medical Societies.

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.

A Case of Typhoid Fever, in which Three Relapses Occurred, with Recovery.

BY J. M. ANDERS, M.D.

The patient, Sallie L., aged fourteen years. Her illness began April 10th, 1881. My first visit was made on the morning of July 12th. The history of the case, in the meantime, a period of about three months, was obtained chiefly from the mother, who is quite an intelligent lady. She stated that her child had passed through a grave form of typhoid fever; that for the first three weeks the fever ran very high. There was, during the same period, constantly marked delirium, with diarrhœa, the stools being described as of clay color. April 16th, six days after the onset, a hemorrhage from the bowels occurred, and on April 23d another, both of an alarming character. There was also present a dry cough, and occasional epistaxis. The mother states that the physician then in attendance had given up all hope of recovery. But, notwithstanding this unfavorable outlook, the patient finally rallied, and began to slowly improve, until she had reached the threshold of convalescence.

About the 15th of May she grew suddenly worse, the fever increasing, and the cough becoming more marked.

May 17th Dr. William Pepper was called in for consultation, and a relapse was diagnosed. The symptoms during this relapse were slightly less grave, excepting intense bronchial catarrh, than during the primary attack, and its duration about four weeks. She was left excessively weak, and markedly emaciated.

A very gradual convalescence now set in; indeed, she had made so little progress during the remainder of the month of June, and up to July 6th, that at the latter date she was scarcely able to sit up in bed, and was still very much emaciated. She had returned to solid food two

weeks previously, and her appetite during this time had been very good. On July 9th, the father very imprudently carried her down stairs, and set her on the front doorstep. On the evening of the same day she again became very ill, the symptoms being similar to those attending the first relapse. The visits of her physician had been discontinued, and for two weeks she had no medical attendant.

On July 12th, at 10 A.M., I was called. The first symptom to attract attention was the marked emaciation of the patient. The temperature was 103°, pulse 130°, and weak. There was occasional cough and a slight mucous expectoration. On auscultation, numerous râles were heard over the whole extent of the bronchi of both lungs, showing decided bronchial catarrh. There was considerable tympany and gurgling upon pressure over the right iliac fossa. There was hebetude and slight delirium.

On the evening of the same day, Prof. Wm. Pepper was again called, and, after making an examination of the patient, expressed the opinion that, undoubtedly, a second relapse had set in. Having seen the patient on two different occasions in consultation, the Professor kindly gave me some of the most important and interesting points in the previous history of the case, according with those above given. The subsequent course of the affection left no doubt as to the correctness of Dr. Pepper's opinion. The temperature now, at 6.30 P.M., was 104, pulse 132. Bowels had moved three times the previous day. There was nothing in the treatment but what is well known, and therefore it need not be stated. The eruption was observable on the following day, which was the fourth day of the fever. The temperature up to the tenth day was maintained at from 103° to 103.5° Fahr. in the evening, and 101.5° to 102° in the morning. On the tenth day it was again higher, being 104° at 7 P. M. It then began to decrease steadily, and by the end of the third week the temperature was normal. Simultaneously with the fall of the heat, the bronchial congestion began to improve, and when the temperature had returned to the normal, the râles in the chest had all disappeared. The eruption had likewise vanished. There was no hemorrhage from the bowels during this attack, but moderate diarrhœa. During the fourth week the temperature was subnormal, and at the end of the fourth week, August 8th, there was a return of the appetite, and, though there was extreme emaciation and great weakness, she had fairly entered upon a very slow and gradual convalescence. It should be stated that she was, about this time, put on tonic remedies, and the diet was gradually changed from liquid to the solid forms. There was now extremely slow recovery up to September 8th, and she had been sitting up in bed for a week prior to that date. On that day the weather was exceedingly warm, the thermometer standing at 99° Fah. in the shade; in fact, it proved to be the hottest day of the season. Whether on account of the extreme heat or a fresh infection by the fever poison, I will not now stop to consider; but, at any rate, between the hours of 11 A.M., when I made my morning visit, and 9 P.M., the temperature of the patient rose from the normal to 103⅔°. There was a return of cough, and bronchial râles again filled the chest. The bowels were loose, the patient having passed three typhoid stools during the day. The following morning the temperature was [illegible]°. At 8 P.M. 103°. On the morning of the third day a typhoid eruption appeared over the epigastrium and lower part of the thorax, there being only about half a dozen spots. During the subsequent course of the attack no untoward symptoms arose. The temperature chart shows that from the second to the eighth day the evening temperature ranged from 102⅔° to 102° Fah., and the morning was usually 101.5°. Defervescence began on the ninth day, and on the twelfth day of the attack the temperature was normal. Following this, for several days, the morning temperature was subnormal (97.5°). At the expiration of two weeks all the other symptoms had also disappeared. There were no râles in the chest, no diarrhœa or eruption, and the mind was clear. Oct. 1st, convalescence was again fairly established, for the fourth time, and recovery was retarded by certain complications as will be seen hereafter. Already, during her convalescence from the second relapse, I observed that her lower limbs were partially flexed, and on attempting to straighten them, found I was unable to do so. The right could be almost made straight, but the left knee could not be brought within about four inches of the bed. There was no difficulty in making flexion, and the chief trouble appeared to be a contracture of flexor tendons situated at the back of the knee. Passive motion was practiced three times daily, with the use of stimulating embrocations. This treatment soon gave her the use of the right limb, enabling it to be extended perfectly. Though the left was greatly improved she was not able to fully extend it until after she had gained sufficient strength to walk, and had so used it for a week or more.

October 8th. The patient was placed in a reclining chair, being unable to walk or even stand on her feet. The pulse was observed to run up immediately, from 100 to 130 beats per minute. My notes of this date show that there was a want of power of the heart. The first sound being weak and slapping in character, as if the walls were thin and dilated.

October 18th. General condition improving; the patient has gained considerably in flesh and strength. Heart weak, and after sitting up for a couple of hours, or, after walking a short distance, which she was now able to do, with her mother's assistance, the heart's action would be much increased in frequency, the pulse reaching 144 per minute. The rhythm was slightly irregular, but there was no audible murmur.

November 1st. Pulse rate, when sitting, 120 per minute, and the irregularity of the heart has become quite marked since last note. Since October 25th, or one week after, the heart had become irregular, choreic movements of the limbs and muscles of the face were observable. By the middle of November all the choreic movements had disappeared, and almost simultaneously the heart's action became regular and less frequent. As a result of her voracious appetite

and moderate exercise in walking about the house, she now rapidly increased in weight and strength, and by December 1st was practically cured. No doubt the age and lean condition of the patient were conditions favorable to recovery.

Remarks.—Relapses after typhoid fever are not of rare occurrence. Liebermeister observed them in 8.6 per cent. of 1743 cases at Basle; Gerhard, from reports on typhoid fever, in 6.3 per cent. of 4434 cases, and Baümer had relapses in 11 per cent. of 73 cases of the fever.* Double typhoid relapses are much less frequent than single. Thus, *e.g.*, of Liebermeister's 1743 cases, of which 8.6 per cent., or 111, had a single relapse, only four were instances of double relapse. And in only a few instances has a third relapse been reported. Irvine has had an opportunity of studying five of these latter cases,† and in the limited time at my command to prepare this paper, I have not been able to find the records of any other cases, though most probably others have been reported.

Was my case one of veritable triple relapse? Murchison defines a relapse after typhoid fever as a second evolution of the specific febrile process, after convalescence has been fully established. In his article on typhoid fever, Liebermeister says, "It is often difficult to determine, especially at first, whether a new onset of fever is due to relapse or to some local affection. The characteristic manifestations of typhoid fever often reappear later, more or less decidedly, and then a positive diagnosis is easily made."‡

That the patient whose case we are considering had two relapses, no one will question. Let us, then, compare the notes of the case during the last febrile attack with the requirements of this standard. It cannot be doubted that our patient was free from fever at the time of the last seizure, as the temperature had been normal for a period of at least five weeks, and convalescence, though exceedingly slow, in consequence of the greatly reduced condition, was certainly fairly established. It has been stated in the notes that she had been sitting up in bed for a week previous to the last attack.

On the 8th day of September the temperature suddenly rose from the normal to 103° Fahr. This was attended with dry cough, general bronchial catarrh, as evidenced by râles heard on auscultation, and by typhoid diarrhœa. The bowels had previously been moved only once daily. The course of the temperature was typical of mild typhoid fever or a mild relapse, for the two are very similar, except that there was no secondary rise, as is usually the case, and which was present to a slight degree in the previous relapse. The febrile attack was also very short, the temperature having returned to the normal on the twelfth day. But, according to Liebermeister, there are mild cases of typhoid fever in which the fever lasts only sixteen days, and the same author states that the duration of a relapse is usually much shorter than the primary attack. Hence, as regards duration, the fever was quite compatible with a relapse. As was to be expected in the case of a relapse, with the defervescence of the temperature all the other prominent symptoms alluded to subsided. The fact that there was present a typhoid eruption would seem to fully establish the character of the attack. This eruption, which appeared on the third day, consisted of about half a dozen spots, three of which were of good size. These spots corresponded with the observations of Dr. J. M. DaCosta, being coarser and redder. They were also more elevated. Such an eruption can hardly be termed roseola, the color being very like that of our raspberry. The eruption present during the second relapse was of the same description. In a paper * on relapses in typhoid fever, our illustrious DaCosta has also called attention to the transverse markings upon the nails as an aid in the diagnosis of doubtful relapses, in cases that have not come under observation until after the close of the primary attack (Wilson). In the present case, after the last convalescence had nearly terminated, I observed these white markings on the patient's nails, and upon close examination, found there were three distinct transversal white lines, while the fourth was forming at the root. They were not plainly visible on all the fingers, but particularly so on one of the little fingers.

It would appear reasonable to suppose, therefore, that the above facts, in themselves, would place the fact beyond doubt, that the last was a true relapse.

The duration of the entire illness up to the commencement of the last convalescence extended over a period of nearly six months, and including the last convalescence, about two months longer. The total duration of the four attacks of fever is estimated at ninety days. In accordance with the rule, as stated by most writers, the symptoms, during the primary attack, were more severe than during the relapses. After the original, each successive attack, was milder and shorter than the preceding one, thus the duration of the first febrile attack was about thirty-two days, that of the second about twenty-eight days, of the third twenty-one days, and of the fourth only eleven days. On the other hand, the intervals of freedom from fever increased with each successive attack; thus, between the first and second, it was only about three days, between the second and third, upward of three weeks, and between the third and fourth, as much as five weeks. There were no grave complications during the relapses, except, perhaps, the intense bronchitis, and the only sequel was chorea.

Does this case throw any light on the cause of relapses in typhoid fever? There appeared to be an assignable cause for the second relapse, in the fact that the child had been lifted from her bed and carried down stairs and set on the front door step. But Wilson declares that relapse is not to be attributed to error in diet or over-exertion, and that such imprudences are capable of causing recrudescences of fever. The third relapse was, at the time of its occurrence, believed to be due to the extreme heat of the

* Liebermeister, "Ziemssen's Cyclopedia Med.," Vol. I, p. 190.

† Wilson, "Continued Fevers."

‡ "Ziemssen's Cyclopedia," Vol I, p. 190.

* Remarks on Relapses in Typhoid Fever. Transactions Phila. Col. of Phys., Vol. 2.

weather, it having been the hottest day of the season. The weather, however, had been almost equally hot a number of days previously, and the patient had not suffered the slightest inconvenience from it, as she repeatedly stated, in reply to my inquiries. There was nothing to account for the first relapse, save specific reinfection. I am of opinion, from the facts adduced, that the cause of the unusual number of relapses in this instance is to be justly ascribed to *fresh infection* by the specific virus or bacillus causing typhoid fever. Typhoid fever is believed, by all the leading authorities, to be contagious through the stools only, and not from fresh stools, but after they have undergone decomposition. Hence, then, secondary infection may be the result of decomposing excrement upon the body of the patient or his linen, or the bedding. Again, it may arise from failure thoroughly to cleanse the bed-pan after usage. It is probable that the most fertile source is the depository for the excrement. There are those who contend that the only way in which the fever can be communicated is from the original source. In the case under consideration, I do not think that subsequent attacks could have resulted from any but the two last named sources, as due attention was paid to cleanliness and changes of clothing.

It will be interesting to note in this connection that on December 11th the patient's older brother was taken ill with the disease, which proved to be a mild attack, and April 7th, or about one year after the girl was first seized, her younger brother, aged 13 years, was likewise taken sick with the same disease. Were the relapses in the case here reported, and the subsequent cases of the patient's brothers, due to infection arising from the original cause, or to specific poison communicated from the decomposed stools of the patients, which, owing to defective drainage, may have remained in the cesspool? A positive answer to this question, if such could be given, would prove a valuable contribution to medical science, but so far as I am able to judge, any theory based upon the data obtained would be merely speculation.

Remarks.—Dr. J. T. Eskridge observes that, as a rule, relapses occurring after mild attacks are severe, and vice versa. Illustrative of this is the case of a young lady who, convalescing from a mild attack, imprudently sat near an open window and became chilled. A relapse occurred and proved unusually severe. Unconsciousness continued seven days, deglutition was impossible, and the patient was necessarily nourished by enemata. In the hospital, when relapses followed severe primary attacks, several terminated in a really much shorter time, and were characterized by the above rule. The phenomena of typhoid fever vary with different epidemics. A point to be especially noticed is that if the ascent and descent of the temperature is regular, the prognosis may be regarded favorably. If temperature is moderately low, yet irregular in its variations, my experience convinces me that an unfavorable prognosis is unavoidable. In one of my cases, lasting six weeks, when the temperature was subnormal on the ninth day, a fatal issue followed. Regarding the pulse, irregularity of volume is a feature indicative of cardiac weakness, and of evil augury. Irregularity of time is not a condition occasioning undue alarm. This is often due to a condition of dullness, characteristic of the disease, in which the heart itself also participates. Another point regarding temperature, is, that if during convalescence the evening temperature remains subnormal for two or three successive days, relapse may be expected.

Dr. Wittig narrated an instance of a relapse occurring in his practice, complicated by the development of a sternal abscess. This was not evacuated until convalescence was thoroughly reëstablished, when caries sterni was found to exist. In this, as in all diseases, during convalescence, we should especially observe our patients, and endeavor to detect causes of unusual phenomena in the coexistence of complicating affections. Often the systemic resistance to disease is, as it were, balanced, and great care is therefore necessary to guard against disturbance of those functions concerned in the elimination of the materies morbi. Imprudence in diet, exposure, etc., may check a function, result in further enervation, and precipitate a relapse.

Dr. Anders' observations tend to corroborate the experience of Dr. Eskridge, that mild typhoid is apt to have a relapse of a severe type, and the reverse. A mild case followed by a severe relapse and complicated with double pneumonia, and proving fatal, occurred recently. This case was convalescent fourteen days when the untoward symptoms appeared. Regarding the case reported, the temperature preceding the relapse was subnormal in the morning. Evening observations were not made.

Editorial Department.

Periscope.

Syphilitic Infection from an Oral Chancre.

Dr. J. J. Chisolm reports the following case in the *Maryland Medical Journal*:—

The effects of syphilis are so marked that those familiar with the sequelæ of the initial lesion cannot mistake the appearances, especially when they follow each other in a regular order. An iritis, occurring simultaneously with a widely-spread, copper-colored eruption, indicates too surely a constitutional infection from a well-known cause, with a positive diagnosis of syphilis, regardless of the character of the person who exhibits these symptoms. It may ever remain an unexplained problem how the disease was contracted, but as to the disease itself there can be no doubt. Such facts often come before the physician in large practice. In response to the anxious inquiry of parents as to what this can possibly be, the cautious physician gives it

the name of blood poisoning, keeps his suspicions to himself, administers mercury in some of its many forms, and in the course of time has the satisfaction of removing the conspicuous evidences of this firmly rooted disease.

Such a case is now under my care. At the suggestion of her family physician, a mother brings her daughter, a modest young lady of eighteen years of age, to have an inflammation of the eye treated. For ten days the right eye has been much inflamed, accompanied by severe suffering and serious impairment of sight. She had been told that it was a severe cold in the eye, and that it would soon yield to an eye drop which had been prescribed. No improvement showing itself, and the suffering being unusual for a case of catarrhal ophthalmia, the case was sent to me for treatment. I found a marked case of plastic iritis. A very contracted pupil with much conjunctival congestion. An atropia drop had very little effect in enlarging the pupil, which seemed to be bound in every direction. She had not slept for some nights, on acconnt of the severe suffering. Copper-colored scaly spots were noticed on the forehead and chin. She showed similar spots on the arms, and said that they were on all parts of the body. Two months since she had sore throat, and from that time her hair has fallen out in large quantity. By tapping the anterior chamber and emptying it of its aqueous contents, prompt relief was given to the nocturnal pains; and by leeching, with the administration of salicylate of sodium in twenty-five grain doses every three hours, the acute attack of iritis was promptly relieved. Under the local use of an atropia solution, gr. viij to ℥j, one adhesion after another was broken up, with finally a perfectly dilated pupil. From having vision excessively blurred she now reads readily *brilliant*, which means that the eye is perfectly restored. She is now taking biniod. hydrarg., in $\frac{1}{10}$ gr. dose, three times a day, and using on the surfaces most spotted a solution of bichloride of mercury in glycerine. The spots from the face have quite disappeared, and those upon the arm are rapidly fading out.

That this is a clear case of constitutional syphilis, there can be no doubt. The chief interest lies in its origin. During the treatment she called my attention to a thickening of the lower lip at and to the right side of the median line. Five months since what seemed to be a fever blister made its appearance on the lower lip. It attained a considerable size, became surrounded by a hard base, and was six weeks in healing. Some of the hardness still remains, five months from the beginning of the lip sore. When the lip became hard the glands under the jaw at chin and at maxillary angles were very much enlarged and so painful as nearly to stop mastication. It was two months from the ulceration that the general symptoms above narrated commenced to show themselves. She does not know why the stubborn fever blister, as she calls it, made its appearance. She does not remember that any one whom she may have kissed had a sore lip, or that any of her friends had any trouble similar to her own. Such accidental transmissions from mucous labial patches are not rare, but in this latitude are very seldom met with.

Brow Ague.

Dr. G. Stanley Murray relates the following case in the *Lancet*:—

J. C., a gardener by occupation, about forty years of age, came to me a short time ago, complaining of intense pain over his right eye. He said the pain seized him regularly every morning, about nine o'clock, and ceased at seven o'clock in the evening, leaving him, during the remaining portion of the twenty four hours, perfectly free from all discomfort. The attack commenced as a slight itching or tingling in the eyebrow, gradually developing into pain, which, as the day advanced, became so intense as frequently to oblige him to give up work and go home.

On examination I found a slight tenderness over the site of the supra-orbital notch (the seat of the pain), but not of any moment. The patient's general health was good, the appetite unaffected, the bowels regular, and the urine normal. In fact, the man complained of nothing but the pain in question. As he informed me that he had been previously treated by large doses of quinine without experiencing any benefit, I put him upon a course of arsenic and iron, in frequent and considerable quantities for several days, with chloroform liniment and belladonna to apply on lint over the tender spot. This having no effect, I then desired him to try tonga. He commenced taking it the following morning, and in the evening came to say that he thought it certainly did him good, as although he experienced the pain as usual during the day, yet it was much diminished in severity. He determined to continue the drug next day, but left word in the evening (on my being from home when he called),to say that during the day he had been as bad as ever. After this I did not see him for a few days, when he came to tell me that the pain had entirely left him. On making inquiries I learned that,finding the pain was as bad as ever during the second day of his taking the tonga, he called at my house in the evening, to say so, but finding I was out, determined to come again the next day. The following morning he was seized, at the usual time, the pain becoming so intense that he was forced to leave off work and go home. On reaching home he became very sick, and vomited violently, bringing up at last what he described as a "vinegar plant," when immediately all pain and sickness ceased. He was, it seems, very desirous of bringing that interesting specimen of the vegetable world to show me, but his wife dissuaded him from "making a fool of himself, bothering the doctor with that disgusting, dirty stuff!" and so, I suppose, the interests of science suffered! He has since been perfectly free from pain, the attacks having left him. He has experienced this trouble regularly for the last twelve years, although it has never passed away in sickness of stomach before, nor has he ever felt any nausea or discomfort during the course of any previous seizures. He said the attack always commenced during the last few days of March or the beginning of April, and lasted invariably nine, nineteen, or twenty-nine days.

I may mention, his right eye is blind, through cataract, with which he believes he was born.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A tract on "Infant Mortality," before us, turns out to be the advertisement of an "Infant Food" vendor. If pretty much all these foods could be dispensed with and infants fed on the food furnished by nature in the breasts of the mother, infant mortality would receive one of the most positive checks discernible.

——"Electricity in Surgery," by Dr. John Butter, is a volume of 109 pp., published by Boericke & Tafel. The author claims that his methods and recommendations are based almost entirely on his own experience. Some of them strike us as suggestive and valuable, but he certainly claims originality in some instances where it does not belong to him, as in the use of the multiple needles for the treatment of nævi, p. 44.

——The compression of the carotids as a remedial measure in epilepsy and maniacal excitement receives a careful discussion by Dr. J. L. Cushing, in a little monograph of 40 pp. He has devised two instruments for effecting the purpose more readily than by the fingers, and narrates several illustrative cases ("Carotid Compression and Brain Rest," published by Randolph & Co., 900 Broadway, N. Y., price 40 cents).

——"Static Electricity as a Therapeutic Agent" is the subject of a paper by Dr. James Knight. of New York City. He emphasizes particularly its value in paralysis, and gives cases which would be clearer were the Doctor's style more intelligible. We are quite at a loss to understand such sentences as the following: "The electric treatment invariably increased the circulation of the blood to a plethoric condition, that in many instances hydragogue cathartics afforded no relief, but required for their relief venesection."

——The subject of "Preventing Disease" is treated by Dr. J. R. Black, of Newark, Ohio, in a lecture recently sent us. He dwells particularly on the importance of hygiene in schools, and the inculcation of temperance principles. The latter, he thinks, can be done effectually by showing young people specimens of "hob-nailed liver," "shriveled blood corpuscles," "bits of the reddened and thickened stomach of the drunkard," etc. Considering that there are quite as many inebriates, in proportion, in the medical profession as in other avocations, we should have but very modest faith in the efficacy of this suggestion.

BOOK NOTICES.

The Psychology of the Salem Witchcraft Excitement of 1692. By George M. Beard, A.M., M.D., etc. New York: G. P. Putnam's Sons. pp. 112.

This book might as well have been entitled, "Myself as Expert in the Whittaker and Guiteau Cases, with Occasional Reference to Salem Witchcraft." We are informed on the first page that it is "the first attempt ever made to lift the subject of witchcraft out of tradition into psychology." Certainly Despine's *Psychologie Naturelle*, and Maury's works on the witchcraft of the modern ages, not to mention the German monographs, deserve more recognition than this. So far as historical research goes, Dr. Beard offers nothing new; and his analysis of the phenomena is full of prejudice and distorted principles. As to what is the main purpose of this book, sensationalism about the Guiteau and Whittaker cases, it is made up of a series of naked assertions like the following: "There is no civilized country, except America, that would have ever tried Guiteau, to say nothing of convicting him," (p. 30). The volume will add nothing to Dr. Beard's reputation as a scientist, and we may add that it will not detract anything from it either.

Brushland. By John Darby. Philadelphia: J. B. Lippincott & Co. pp. 219.

A breezy book, redolent of the soil in newly turned furrows, of the scent of grass and leafy woods, of the strengthening odor of healthy animals. By his fire in his library, on a fashionable street in a great city, a physician sits and calls to memory the incidents of his experience long ago, on a stubby farm; his wrestling with unwilling nature, to subject her to man's wishes, the people and the clouds of those distant scenes. It is not a treatise on medicine, but it contains hints to cure many diseases, some not named in doctors' books; nor is it an agricultural work, but if the farmer reads it he may learn to root out more weeds than grow on his farm. Nowadays everybody wants to be entertained by a story; this is a story that has something in it more interesting than a plot. A few ask for solid thought, something they can carry away with them; if they read this book and do not find it, the miss will be their own. He who buys it and reads it will put it on a shelf in his library which it is handy to reach.

THE

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EMIGRANT ABUSES.

It is the duty of physicians to call the attention of the Government to a most crying outrage that is now being perpetrated by certain unscrupulous and conscienceless individuals in England upon emigrants. An outrage, widespread in its injurious results, which are not confined to the poor emigrants alone, but ramify and spread throughout every portion of our land, affecting or liable to affect all the inhabitants thereof. The *Lancet* tells us that there has recently sprung up in England a nefarious traffic with regard to the transportation of emigrants from that country to America, by which the wholesome regulations enforced by the Passengers Act are evaded. The act provides for a systematic sanitary inspection of emigrant quarters on all trans-Atlantic steamers, forbids overcrowding, and ensures that the provisions served out during the voyage are sufficient in quantity and of good quality.

To evade these beneficent regulations, the agents of these unscrupulous companies, when they have secured an adequate cargo, ship the unfortunates across to some Continental port, and embark them in vessels provided by foreign owners. Sometimes they fall into the hands of respectable companies, who, having some reputation to lose, provide reasonably fair accommodations; but more often they are consigned to some company hastily formed to gain some of the overflow traffic from the regular lines during the very busy season, and in such instances the fate of these poor emigrants is truly deplorable. The steerage is filthy, the passengers are packed like sheep, and the food is both scanty and miserable in quality. The inferior officers, who come into contact with the steerage passengers, exercise the greatest tyranny, even going to the outrageous extreme of selling them food and water at the most exorbitant prices.

Recently one of these vessels arrived in New York, when it was discovered that the water given the steerage was brackish, while the children received a rancid mess, composed of condensed milk and salt water. Diarrhœa and dysentery broke out during the voyage, and an epidemic of measles occurred among the children. Eighteen of the passengers died. This condition of affairs not only works individual injury to the emigrants themselves, but is the very state calculated to breed and fasten disease in our own country. We are the ones to suffer, therefore, does it behoove our Government to take energetic measures to correct this evil. We should resent in the most emphatic manner, and in unequivocal terms, this outrage that is being perpetrated upon us.

CARE OF THE TEETH.

How few physicians, to say nothing of the general public, ever give much, or, indeed, any, thought to their teeth. When they are afflicted with a twisting, gnawing, grinding toothache, they will off to the dentist's and have the offending little ivory pulled or plugged; but to the majority of mankind dental hygiene is an unknown art. So long as there is no pain, and we can chew our food, all right, matters are well enough, and we almost forget that we possess such appendages as teeth. The danger of this

apathy in regard to these very important portions of our bodies has been appropriately pointed out by Dr. WILLIAM D. KEMPTON, of Cincinnati, a brief of whose paper on "*Oral* Hygiene," read before the Section on Oral and Dental Surgery," at the late meeting of the American Medical Association, we give elsewhere. According to Dr. KEMPTON, decayed teeth may cause headache, earache, affections of the eye and of the stomach. A case has been reported wherein the diagnosis was made of malignant disease of the inside of the cheek. A small sore, with rough, thickened and hardened edges, persisting for some time, and resisting all treatment, was diagnosed as above stated. An operation was recommended, and the day decided upon.

In the meantime, a surgeon who always made it a cardinal rule to notice *small* things and upon them to build greater, until he reached his conclusions, examined the patient. With his peering eyes, accustomed to discern trifles, he soon saw a small snag, a remnant, almost invisible, of a former molar tooth, directly opposite this ulcer. He recommended extraction of this irritating little mass, and presto! the *malignant* ulcer healed spontaneously. This is only one of many cases that could be cited to prove the great necessity for care of the teeth. Many, in fact, most of the cases of foul breath are due to decomposing food, lodged from a meal, in the inter-dental cracks and in the excavations of decayed teeth. In a word, dental hygiene, as far as we know absolutely at present, consists in the two following conditions:—

1. Absolute cleanliness—never fail to thoroughly brush and rinse the *mouth*, *tongue* and teeth after each meal.

2. The avoidance of very hot food or liquids immediately after having had something cold in the mouth, and vice versa. These sudden changes will tend to crack the enamel, and thus favor dental decay. Again, when brushing the teeth, one should carry the brush well around the roof, sides and base of the mouth, and over the tongue; in fact, as we have previously said, thoroughly brush the whole mouth, so that any dead and decaying epithelium that may be adhering to these parts will be brushed away. Too much stress cannot be laid on this matter of dental hygiene, and it will be well for all physicians to instruct their patients in the rudiments of the science.

NOTES AND COMMENTS.

Diphtheritic Conjunctivitis Treated with Quinine.

In the *Lancet*, Dr. John Tweedy records four cases of pseudo-membranous (diphtheritic) conjunctivitis, in which he derived most satisfactory results from the local use of a solution of quinine. Three of the four cases occurred in men and one in a woman. Two began as purulent conjunctivitis, of gonorrhœal origin, and two were pseudo-membranous from the first. As soon as the nature of the disease was definitely recognized, all other treatment was stopped, and quinine lotion, containing four grains of sulphate of quinine, with a small quantity of dilute sulphuric acid (to effect a solution), to an ounce of water, was alone used. As far as possible the diseased surfaces were kept constantly bathed with the solution, the conjunctival sac being converted, as it were, into a trough, holding the quinine lotion. A bowl of the solution was put within reach of the patient, who was directed to wash the eye frequently, and in the intervals a well soaked compress was kept constantly applied. The house surgeon visited each case three or four times a day, when he would evert the lids and thoroughly cleanse the conjunctival sac with the quinine lotion.

The superficial, disintegrated portions of the exudation were then gently removed with wet lint, care being taken not to aggravate the inflammation by rough handling, or by rude attempts to tear off the false membrane. Usually the quinine lotion was iced. In two cases the local application of powdered sulphate of quinine was tried at first, or sulphate of quinine rubbed up with an equal part of calomel; but in addition to causing great pain, the powder did not seem to be as beneficial as the quinine in solution, and its use was soon abandoned. The virtues of quinine he believes to be specific in the diphtheritic exudation. Three of the cases recorded were at first treated by frequent ablutions, with a five per cent. solution of carbolic acid, and in every instance the pseudo-membranes rapidly spread under these applications, whereas they were immediately controlled by the quinine lotion.

Forced Alimentation in Phthisis.

This question has latterly attracted considerable attention in France, particularly through the clinical experiments of M. Debove, who has been in the habit of giving to such patients milk and eggs exclusively, but in large quantities.

At a recent séance of the Soc. Medicale des Hôpitaux, he informed the Society that he had recently substituted pulverized meat for the former exclusive alimentation by eggs and milk.

He was led to this practice through consideration of the fact that carnivorous animals are less frequently affected with phthisis than herbivora.

M. Debove makes use of powdered meat prepared as follows: The raw meat is placed under a powerful press and all the juice squeezed out, and put one side; the dry meat is then placed in a slow oven and finally reduced to a fine powder, which is carefully sifted. Four pounds of meat give, by this process, somewhat over six ounces of this powder, which may be mixed with or beaten up with eggs, for use in alimentation.

Relatively, considerable proportions of meat thus prepared may be taken on weak stomachs. M. Debove habitually administered, per diem, half a pound of this powder with twelve eggs and a quantity of lentil flour. Phthisical patients thus nourished regain flesh rapidly, and at the autopsy of one of them who died through accident, it was found that there was a commencement of cicatrization in some of the cavities.

M. Dujardin-Beaumetz confirmed the results obtained by M. Debove's method, and stated that he had also found it of inestimable service in two cases of incoercible nervous vomiting.

Oxyuris Vermicularis.

Dr. James P. Kingsley writes about these worms in the St. Louis *Medical and Surgical Journal.* They may exist in considerable numbers, and for a long time, in a child, without attracting notice by any symptoms of importance. The most frequent symptom is scratching of the anus, especially at night, after the child has become warm in bed, an increased amount of mucus at that time favoring the movements of the worms. There are frequent attempts to evacuate the bowel, which, in many cases, results in the discharge of a small quantity of mucus. Often there is such violent straining at stool that the bowel becomes prolapsed. Sometimes the worms migrate into the vagina, and there excite great irritation, inflammation of the vulva and leucorrhœa. In the male they may cause erection and sometimes balanitis, also pain upon micturition and defecation. Since these parasites inhabit the large bowel only, and usually the lower portion of it, they can readily be removed by the use of proper enemata. The best treatment is the daily injection of two or three ounces of lime water into the rectum, together with the occasional administration of a mild purgative, either a teaspoonful of castor oil, or one grain of calomel rubbed up with five grains of sugar, at bedtime. A solution of common table salt injected daily answers an admirable purpose. When there is a relaxed condition of the bowel, evidenced by its protrusion when straining at stool, an astringent injection should be used. In such cases he uses the following:—

℞. Ferri sulphatis, ʒj.
Infus. quassiæ, Oj. M.

Sig.—Inject four ounces every morning.

The mother or nurse must be careful to wash away all the parasites she can find in the folds about the anus. The great itching that comes on after the patient has gone to bed may be effectually relieved by an application, to and within the anus, of the following ointment:—

℞. Iodoform, ʒ ss
Ung. zinci. oxid., ℥ ss. M.

In addition to local treatment, tonics are usually required, more especially in strumous children. The preparations of iron are decidedly beneficial.

Contagium Vivum Malariæ.

The *Lancet*, in discussing the various causative agents of malaria that have been brought forward by different investigators during the past few years, says that Cuboni and Marchiafava have brought forward some valuable investigations on the blood of patients suffering from the disease. They constantly found spherical, mobile microorganisms, in variable number, and always in the interior of the white corpuscles. At the commencement of a febrile paroxysm small bacilli were seen, bearing a spore at each end. During the progress of the attack these bacilli lessened in numbers, while free spores became more abundant. Richard has found the parasite described some months ago by Laveran to be invariably present in the blood of patients suffering from malaria, and has never seen it in the blood of patients suffering from other diseases. The organism has a special habitat, the red corpuscles of the blood, in which it develops, and which it leaves when it has arrived at a perfect stage of development. In several of his preparations Richard has actually seen the organism

escape from the corpuscle, which remained attached to it on one side, as an extremely delicate circle. In other cases the mobile filaments alone pierced the capsule, within which the body of the organism remained enclosed. Richard suggests that the comatose condition sometimes observed during attacks of endemic fever may be due to the obstruction of cerebral capillaries by masses of these special organisms.

Steatomatous Tumors Obstructing Labor.

In the *Virginia Medical Monthly* Dr. E. N. Chapman relates some instructive cases, in which steatomatous tumors so interfered with the free passage of the child as to constitute serious impediments to natural labor. Examination in these cases revealed a growth springing from the promontory of the sacrum and the adjacent parts, occupying two-thirds of the superior strait, extending into the excavation and terminating in a prominent globular mass the size of a goose's egg. The os uteri was well dilated, and the child's head rested upon the symphisis pubis and against the anterior face of the tumor. A trocar was introduced into the tumor and upon withdrawing it, nothing flowed from the canula, and yet its point moved freely in every direction, showing that a cavity of some sort had been reached. Being laid open by a bistoury, a brain-like substance began to exude. This being turned out by the finger, the tumor collapsed, the child's head dropped into the excavation, and the labor was terminated at once by the forceps. There was no unusual hemorrhage then or afterwards, and the empty walls of the tumor, which had contained a pint, at least, of steatomatous matter, hung loosely from the posterior third of the pelvic brim. Peritonitis subsequently set in and the patient died on the sixth day. The other cases were similar to this one in all essential particulars. In other cases reported the patients made good recoveries.

Inoculation of Leprosy.

The *British Medical Journal* says that a recent number of Virchow's *Archiv* contains an account by Professor Köbner, of Berlin, of attempts to inoculate leprosy on animals. The results were negative, but the experiments possess interest. They confirmed the investigations already made concerning the bacillus of leprosy. He not only found the organism in fresh juice from the tubercles, but found it in preparations that had been many years in alcohol. While these experiments demonstrate nothing positive further than a corroboration of the causative agent of leprosy, yet they constitute one more step toward the elucidation of the nature of this terrible disease.

Correspondence.

Disintegrated Hepatic Calculus.

Ed. Med. and Surg. Reporter:—

Apropos of the above caption, except in the place of hepatic read renal, in June 17th number of this journal, page 659, I am constrained to report the following recent case: J. W., age 48 years; Sunday morning, June 11th, before rising, was taken with sharp, colicky pains in right hypochondriac lower epigastric, extending rather to the front and somewhat to the right side; this was followed by a second and a third paroxysm in the course of an hour. The sufferer, a man of great fortitude and uncomplaining temper (his wife remarking that he never would complain unless something really serious was the matter), kept the bed most of the day, rested well Sunday night, but on Monday morning, on the return of the pain with aggravated symptoms, sent for me. On my arrival, found him calm and free from pain, with some soreness in the region of lower border of liver, tender on palpation, slight bronze shading of the face and conjunctiva; but told me that uniform pressure in an exacerbation relieved the pain; waited some time, but no return of paroxysm. The evil spirit of pain would not rise at my bidding. Gave pills, one-quarter grain sulphate of morphia, to be repeated on the approach of pain; also linimentum chloroformi comp., to be applied to vesication if necessary, and pills cholagogue, in full dose.

Before leaving, however, judging from the severity of the symptoms as described by himself and wife, diagnosis by elimination seemed to me to point unmistakably to biliary calculi, and I so expressed myself.

My patient, a very intelligent man, and fully alive to his condition, perfectly agreed with me (not a very important matter, by the way, but not always attainable). Remained in same condition all day Monday, but I was again summoned at eight o'clock, and found him in great agony. Administered, promptly, mixture of chloroform and ether, 1–2 and grain ½ sulphate of morphia, hypodermically, followed by successive inhalations of the above anæsthetic, and in less than one hour another hypodermic, same quantity; this produced quiet and sleep.

Saw him again at eleven o'clock; restless, vomited, which gave relief; no bile; left morphia pills; refilled four-ounce bottle of anæsthetic; left instruction to *watch* and *wash* stools.

Passed comfortable night; no stools; gave five pills comp cath., U. S. P.; "acted very well;" several evacuations; relieved; called next day to see me; stools washed and found dessert-spoonful of sand, grains size of a pinhead, quite friable. Patient quite well, with the exception of soreness in former seat, which was entirely relieved by hot fomentation; diagnosis confirmed.

Do not see how I could have made a chemical laboratory of my patient's stomach and gall bladder, and made soluble this calculus.

Youngstown, O. J. D. Littlefield, M.D.

Belladonna Poisoning.

ED. MED. AND SURG. REPORTER:—

At about 7½ A.M., June 5th, I was summoned to attend Andrew L., aged thirty-five, who the messenger said was thought to be poisoned. I went immediately, and upon arriving found Dr. Culverson, of this city, already there. Upon inquiring we found that at about 6.30 A.M., Mr. L. had taken a teaspoonful of what he thought to be fluid extract cascara sagrada, but which, from the physiological effects produced, we determined to be belladonna. When first seen by us Mr. L. was in a semi-unconscious condition. Respiration hurried, circulation rapid. Surface of body cool; pupils widely dilated. We immediately gave an emetic dose of ipecac, and repeated every few minutes until we got full, free emesis; also gave stimulants and one-half grain morphia hypodermically. At 7.50, respiration hurried; radial pulse barely perceptible at the wrist; surface of body and extremities cool; pupils still widely dilated. Gave more stimulants. Bathed feet and extremities with mustard water, using friction; also gave one-half grain sulph. morphia subcutaneously. 8.20 A.M. Patient still unconscious. Character of pulse improved, but still feeble. Gave more stimulants. Applied friction to feet and extremities, and applied warm, dry flannels. Administered one-half grain morphia hypodermically. 9 A.M. Patient resting easier, unconscious, warm and perspiring some. Pulse stronger and regular; respiration more natural; pupils somewhat contracted. Gave one-half grain morphia under the skin. 10 A.M. Patient answers questions; called for a drink of water. Pupils still contracting; character of circulation and respiration improved; delirium lessened. Gave one-half grain morphia hypodermically. 12 M. Patient resting easier; all symptoms improved. Complains of dryness and burning sensations in the fauces. 1 P.M. Patient sleeping; circulation and respiration normal. 1.35 P.M. Patient awoke, and, with assistance, walked into another room to attend a call of nature. 3 P.M. Patient was given one-quarter grain of morphia by the mouth. He walked, unassisted, to the privy in the back yard. The case now progressed to complete recovery without an untoward symptom, and on the next day Mr. L. was upon the street attending to his business.

CASE 2.—At same time and place. Carrie L., aged 14, daughter of Mr. L., took three-fourths teaspoonful of the same drug her father had taken. At 7.30 A.M., when first seen by us, Carrie was in a critical condition. The extremities and whole surface of body was cold. Circulation rapid and feeble. Rapid pulse, being imperceptible at the wrist. Respiration shallow and hurrried. Pupils dilated to their fullest extent. We administered an emetic immediately and it acted promptly. Gave stimulants and injected one-third grain sulph. morphia into the arm. Applied mustard to feet and extremities and used friction. Placed heated irons at her feet and around her person. 7.50 A.M. pulsation of radial artery can now be felt at the wrist, but it is very feeble. Pupils still widely dilated. Surface of body still cool. Respiration somewhat improved. Administered stimulants. Applied friction to feet and extremities, and reapplied the heated irons and gave one-half grain sulph. morphia hypodermically. 8.30 A.M. circulation and respiration much improved in character. Whole surface of body and extremities warm. Pupils somewhat contracted. Gave one-third grain morphia under the skin. The case now gradually grew better, but being a child of nervous temperament and delicate constitution, she did not recover as rapidly as her father, but is now all right again and attending to her studies at school. W. C. CARRELL, M.D.

Greenfield, Pa., June 7th, 1882.

NEWS AND MISCELLANY.

AMERICAN MEDICAL ASSOCIATION. MEETINGS OF SECTIONS.

Section on the Practice of Medicine.

TUESDAY, JUNE 6.

The Section on the Practice of Medicine, Materia Medica and Physiology met, according to programme, at the Opera House, at 3 P.M., Tuesday, June 6th, and was called to order by Dr. J. A. Octerlony, of Louisville, Ky.

The first paper read was that of Dr. J. Hilgard Tyndall, of New York City, on "*Home Treatment of Pulmonary Consumption, by General and Local Antisepsis, on the Basis of Strict Individualization.*" Dr. Tyndall being absent this paper was read by the Secretary. Dr. Tyndall's paper started out by saying that pulmonary consumption comprises a number of more or less chronic destructive processes of the lungs, the remote as well as the direct causes of which are as numerous as are the ills that flesh is heir to. Every individual has his own standard of physical well being, his individual physiology. The paper then proceeded at length to give some of the causes which lead to the disease and suggest a method of treatment. The paper is divided into different heads, describing "*Local Antisepsis,*" etc., giving the method of treatment in each case and the result.

At the conclusion of the reading a motion was made to refer the same to the Committee on Publication.

Dr. Davis, of Chicago, desired to know whether the paper was of sufficient importance to entitle it to that reference, and read the law upon the point. He thought no departure had been suggested from the present practice, and no new methods of treatment were mentioned.

The motion to refer was withdrawn, with a motion to refer the paper back to its author, with the request that he publish the same in some medical journal, which motion prevailed.

The next paper read was that of Dr. John V. Shoemaker, of Philadelphia, on "*The Therapeutic Action of Chlorate of Potassium.*"

The Doctor proceeded to say that this powerful, energetic and active drug was discovered about the end of the last century (1786) by Berthollet, and was used for the first time by Fourcroy, in 1796, with the idea that it might transmit some of its oxygen to the body. At its introduction this salt was principally recom-

mended as an antidote to scurvy. Chaussler proposed it as a remedy for croup. It had completely fallen into oblivion, when Dr. Blanche, repeating the experiments made in 1847 by Hunt and West, with this medicine, in the treatment of gangrene of the mouth and pseudo-membranous stomatitis, was led to try it in the treatment of pseudo membranous sore throat and croup. He quoted from many foreign authorities, tending to prove the efficacy of the drug in cancroid affections. etc., and said in this country the use of this important remedy had received but little attention, in the way of reported successes from its use, except from a few observers, among whom was Dr. Thomas Drysdale, who, in a paper read before the Philadelphia County Medical Society, in January, 1877, gave a history of some remarkable cures resulting from its use in diphtheria and pseudo-membranous croup. The Doctor then added that he, also, had met with marked and decided success from its internal use in scrofulous skin diseases; likewise, Dr. M. Landesberg, of Philadelphia, had reported very gratifying results from its topical application in epithelioma of the eyelids.

Dr. Shoemaker referred to its internal use, and said that the chlorate of potassium as a remedy in croup and diphtheria has been used with great advantage by many eminent and experienced practitioners, from the time that it was first successfully applied by Chaussier, in 1819, then by Hunt, Blache, Isambert, and Drysdale, and others, up to the present day. It should, in both these maladies, be given in decided doses, in from five to thirty grains, three or four times daily, until the system is thoroughly under the influence of the drug, providing the patient can bear the quantities just named.

He has used the chlorate of potassium with the most marked benefit in phthisis. He does not maintain that it has any curative action upon the disease, but does hold that, in many cases he has seen, it has greatly assisted in prolonging life. It acts in a peculiarly gratifying manner, by soothing the mucous membrane of the throat and gastro-intestinal canal. It increases the appetite, and thus very materially and conspicuously adds to the weight of the body. It changes the impure and unhealthy blood into a purer and better material.

In marasmus, particularly of children, the use of small doses of this salt has a very satisfactory and beneficial influence. He has administered from one to three grains, three or four times daily, to weak and puny infants, who would regain their nutrition, and fatten on its use in conjunction with good food.

This paper gave rise to some discussion, participated in by Dr. Hollister, of Kentucky; Dr. Gann, of New Jersey; Dr. Bennett, of Michigan; Dr. Davis, of Chicago; Dr. Lester, of Missouri; Dr. Boyd, of Indiana, and Dr. Bell, of Kansas.

The discussion was closed by Dr. Shoemaker, in answer to the arguments in opposition to the opinions given in his paper. The discussion was more especially confined to the treatment of cases of diphtheria. Dr. Shoemaker held that chloride of potash was the most effectual remedy, in which he was sustained by several members, while others favored the use of iron and quinine.

Dr. Koffman, of Nebraska, moved that the paper be referred to the Committee on Publication, and made an eloquent plea in favor of his motion, which was adopted by a unanimous vote.

Dr. Campbell, of Georgia, brought up the subject of the deleterious effects of the use of tobacco, and argued at some length to show how its use affected the human system, and suggested its treatment the same as patients are treated who are under the influence of alcohol or opium.

Dr. Cook, of Tennessee, had used tobacco for eighteen years, but gave it up about a year and a half ago, and felt better for it. All desire for it had disappeared.

Dr. J. V. Shoemaker, of Pennsylvania, and Dr. Octerlony also mentioned cases where all appetite for tobacco had disappeared. Without any formal action on the subject the Section adjourned.

WEDNESDAY, JUNE 7.

The first paper was read by Dr. John V. Shoemaker, of Philadelphia, on "*The Treatment of Syphilis by Subcutaneous Sublimate Injections.*"

He spoke at length of the progress in medicine of the hypodermic method of treating diseases, from its first use by Alexander Wood, of Edinburgh, whose experiments date since 1853. up till the present time. The first to use hypodermic injections of mercurial salts was Scarenzio, of Pavia, who was soon after followed by Hebra, Hunter, Lemin, Martineau, etc.

In his practice he said he usually selected for his hypodermic injections a good glass syringe. Experience has proven to him that these were the best, the metal ones being unsatisfactory, owing to the metal becoming corroded in using the sublimate solution; the hard rubber syringes were too fragile to answer the purpose, it needing but slight manipulation to break them. To these syringes he ordered specially long needles, of the length of 1½ inches or so; his reasons for this were, the other needles are so short they do not penetrate deeply enough, and his object was to penetrate deeply into the subcutaneous cellular tissue. He has learned from the experience of others that the abscess following hypodermic injections of corrosive sublimate was due either to the use of a very short needle, that would not penetrate sufficiently, or to the operator, who may have failed to push it far enough into the integument; and should the latter be the case, the fluid will be deposited in the stratum of the cuticle in which the absorbent vessels are wanting, and inflammation will undoubtedly supervene, causing abscesses. If, on the other hand, the operator has a sufficiently long needle, and will take the precaution to drive it down to the cellular tissue, which is abundantly supplied with absorbent vessels, no injurious effect will follow. He always, in addition, had his patients in private practice to own and carry their own needles, to prevent any possible contagion.

These needles were usually made of steel, and sometimes gold and silver plated; but he always observed that they generally rusted, and he therefore endeavored to use another metal for

the needles and found *gold* to answer every purpose, as it was the only one of all the metals not affected by the sublimate solution.

He uses the following formula:—

℞. Corrrosive sublimate, 1 part.
Distilled water, 100 parts.

In using the first solution he usually began on weak patients with one-eighth grain (10 minims) doses, and continued the same every day until the disease showed signs of abating or the patient experiences the constitutional effects of the drug. In stronger subjects he began the dose at the same quantity, and gradually increased it, minim by minim, every second or third day, until the same result had been obtained. After the patient had received a full mercurial impression in the manner above given in case any of the syphiloderm should still be present, the doses were gradually diminished, just giving a sufficient quantity to keep the system under a gentle influence until all traces of the disease had disappeared. In some of the cases, especially those of an obstinate character, he was compelled to push the drug until he obtained the constitutional effects, which were marked by headache, vertigo, hyperæmia of the mouth, gums and cheeks, increased flow of saliva, difficulty of mastication, disturbances of digestion and diarrhœ, before the syphiloderm would disappear. In others—about nine—who were peculiarly susceptible of mercury, all the constitutional effects followed after several injections of one-eighth grain, although he tried the peptones, chloride of ammonia, water and glycerine—together and separate at various times—without avoiding the stomatitis that Dr. Martineau has since reported did not result in his hands with all the above named combinations. He was always compelled in these cases to begin with one or two minims of the solution and gradually increase the dose, minim by minim, until he reached the point where the patient showed slight evidence of intoxication from the drug, and then decrease it. After using all the various combinations upon the cases under his care, he came to the conclusion that plain water and the sublimate gave him the best results.

He believes this method to be the most speedy and certain way to eradicate syphilis, and prevent at the same time a loss of flesh and vigor of the body that unquestionably follows pouring digestive mercury or iodide of potassium into the stomach. The latter organ, together with the intestinal canal, becomes irritable, the secretions become deranged, and the patient is usually debilitated and broken down in all respects after he recovers from a successful course of syphilitic elimination. The after effect being almost as bad as the former disease, or in case any trace of the syphiloderm remains, the system is too weak to pursue further the internal administration of the drug. It is the belief of Dr. Shoemaker, where the hypodermic use of the sublimate has failed, it has been entirely due to the carelessness of the operator. As a rule physicians do not care to go through the procedure he has just described in giving the injection. They do not seem to share in the desire to make the treatment successful, and as an apology, object to the length of time that would be consumed before the result is reached.

He recommends the subcutaneous method of treating syphilis, because his results have been so good, and from the experiments he has made, his conclusions for its use are:—

First: The *accuracy* and *precision* of the dose. By the stomach corrosive sublimate changes into an insoluble albuminous precipitate, and does not remain long enough in the body to become absorbed, and hence much of it is lost; so, no matter how precise you may be in administering the drug by the mouth, it is almost certain that some of it passes away unabsorbed. By the hypodermic method this is entirely done away with, the precise dose is taken up by the absorbents into the system, and after its object has been attained is eliminated through the proper channels.

Second: By its use we *preserve* the healthful action of the stomach and bowels; the internal action of the drug on these organs he has already mentioned.

Third: Its *use*: That we may use it in most all cases, in fact, in all, without any baleful results, is conclusive to its application.

In conclusion, he related some of the reasons which render the method distasteful to many physicians:—

First: A dirty syringe or a rusty needle produces inflammation, and an abandonment of the method by one. Again: a short needle or a failure to drive it into the cellular tissue has caused an abscess, and non-success to another. The failure to scatter the solution when injected or to force out the air in the needle, gives pain to the patient and discourages a third. The building up the system with tonics and good food, and the use of the sublimate at the same time, has been overlooked by the fourth, and the results drop below his expectation. The peculiar susceptibility of some persons to certain drugs in very small doses, are lost sight of, the mercury suddenly poisoning the patient, and the physician condemns the method, and so on, *ad infinitum*.

Such, in a few terms, are some of the prominent causes why this potent and valuable method has failed in the hands of some of the American practitioners; and if they would only have patience and try, in an *experimental* manner, by beginning with the very smaliest doses, and continue with great care, their results would be more gratifying. It is not with haste that such methods can be tried and rejected, but one must take time and trouble, and study each phase of its peculiarity, and then with certainty adopt his decision.

Discussion of the paper ensued, participated in by Dr. Gallaher, of Pennsylvania, Dr. Bennett, of Michigan, and others.

On motion of Dr. Gallaher, the paper was referred to the Committee on Publication.

Before adjourning Dr. Shoemaker suggested that some steps be taken to infuse a little more interest in the Section relating to the practice of medicine. It is a shame that it has been neglected for some years past. President Hooper might suggest a remedy.

Dr. Hooper did not know as he could suggest any remedy. If the president of the Section did not feel interest enough in the meetings to

be present, it was not strange that others were not in attendance.

Dr. Shoemaker moved that the Secretary, Dr. Reynolds, be instructed to communicate to the Nominating Committee, asking that for the coming year they will elect officers who will pledge themselves to be present and take sufficient interest in the Section to make it successful in its work.

Dr. Bennett doubted the policy of passing such a resolution, as it might seem to imply censure.

Dr. Hooper said the resolution did imply censure, or otherwise there would be no object in offering it, and we might go forward as usual.

Dr. Whitney, of New York, supported the resolution, as something was necessary to be done. It was not pleasant to waste the time of the delegates in this manner.

Dr. Shoemaker had only the good of the Section in view in offering the resolution.

A running debate took place, and the resolution was finally passed, without a dissenting vote.

After some further general remarks the Section adjourned.

THURSDAY, JUNE 8.

Dr. M. Donnelly, of New York, read a paper on "*Salicylate of Potassa and its Use in Acute Rheumatism and Dyspepsia.*" He said that he had been making some experiments, hoping to find some alkali which could be combined with the salicylic acid and make a more thoroughly alkaline salicylate than that given by the combination with soda. Two parts of bicarbonate of potash and one of salicylic acid dissolved in a small quantity of water gave a neutral solution. The potash was then increased in quantity until one part of the acid united with two parts of potash—about ten grains of acid to twenty grains of potash in a drachm of water—formed a clear alkaline solution. This compound he found very beneficial in the treatment of flatulence, pyrosis and acid dyspepsia.

Dr. Hollister, of Chicago, called attention to the liability of the salicylates in large doses to reduce the force of the heart's action.

Dr. Thomas N. Reynolds, of Detroit, had used salicylate of soda frequently in rheumatism, with marked benefit. The cases must be selected. Climatic and miasmatic conditions often influence very profoundly the course of rheumatism, and we must not rely too conclusively on any one plan of treatment.

Dr. Kyle, of Indiana, thought this drug useful, but considered quinine and iron indispensable in malarious districts.

Dr. J. A. Octerlony thought the salicylates of soda and potash were more particularly applicable in recent and very acute cases, with high fever. In the anæmic and weak, he preferred large doses of tinct. chloride of iron. After adopting a resolution extending a vote of thanks to the Chairman and Secretary, the Section adjourned.

Section on Obstetrics and Diseases of Women.

TUESDAY, JUNE 6.

The Section on Obstetrics and Diseases of Women met at Odd Fellows' Hall, and was called to order at 3 o'clock, by the Chairman, Dr. H. O. Marcy, of Massachusetts.

Dr. Granger, of East Boston, Mass., read a paper upon "*The Mechanical Treatment of Delivery from the Superior Strait.*" His address was illustrated by the exhibition of a modified form of forceps, of his own invention, the novelty being in an appliance or attachment to the ordinary forceps, by the aid of which the author claimed that the head of the fœtus could be depressed while making traction.

Dr. Granger was followed by Dr. Beverly Cole, of San Francisco, with a paper on "*The Forceps and Their Application.*" The author exhibited a forceps of his own invention, for which he claimed the following advantages: The fenestrum of each blade is large at the heel, thus allowing plenty of scalp to protrude through, fixing the forceps so that they will not slip. The shank is very much curved, enabling one to apply the forceps at the superior strait without making pressure on the perineum. The instrument is very light, weighing but fourteen ounces. Dr. Cole then went on to point out the defects in all the forceps now in use. In the discussion which followed the reading of this paper, Dr. Battey, of Georgia, and others, fully endorsed the views expressed by Dr. Cole, and praised very highly his forceps.

Although Dr. P. J. Murphy was unavoidably absent, his subject, "*The Condition of the Cervix Uteri after Emmet's Operation, and Especially it Effects upon Subsequent Gestation and Delivery,*" was taken up by the Section and discussed to the hour of adjournment. The general sentiment in regard to Emmet's operation for laceration of the neck of the womb seemed favorable, when performed by a gynecologist.

A resolution was offered and adopted, requiring members of the Section to furnish a brief of remarks made on the day following their delivery.

WEDNESDAY, JUNE 7.

A paper was read by Dr. Nelson, of Chicago, on "*Especial Pathological Conditions of the Cervix Uteri.*"

Dr. Battey, of Rome, Ga., at the request of the chairman, gave an account of the year's progress in ovariotomy. The session was well attended.

THURSDAY, JUNE 8.

Prof. Dunster, of Ann Arbor University, delivered an address on "*Ovariotomy During Peritonitis, is it Justifiable?*"

This was followed by the report of a case of "*Impacted Retroversion of the Uterus,*" by Dr. H. F. Campbell. Dr. Prince, of Illinois, exhibited a number of obstetrical instruments.

In the absence of Drs. Warren, of Boston, and Cutter, of New York, their papers on "*The Elastic Serrated Uterine Scoop and Curette,*" and "*The Treatment of Uterine Fibroids*" were passed.

Dr. H. O. Marcy then read a paper on "*Treatment of Fibroid Tumors of the Uterus.*" Upon the conclusion of this paper the section adjourned.

Section in Surgery.

TUESDAY, JUNE 6.

This Section organized with Dr. William A.

Byrd, of Illinois, as Chairman, and Dr. Hugh McColl. of Michigan, Secretary.

Dr. Carl Seiler, of Philadelphia, opened the session with some remarks on the uses of electricity in surgery. In his experience the platinum knife of the galvano-cautery, in order to be serviceable, must have a fixed temperature, varying according to the end desired. He has devised an instrument, so arranged that the plates are suspended above the liquid, and can be immersed by means of a treadle, worked by the foot of the operator. In order to overcome polarization, and continue the current for any length of time, he has introduced two cells, containing the same number of elements, which can be alternately immersed by the treadle, thus always exposing a fresh surface to the action of the acid. The thermal cautery cannot be used in many cases, for example, in certain conditions in connection with the turbinated bones, whereas the galvano-cautery knives can be made so delicate as to enable the operator to reach any point.

Dr. William Hill, of Bloomington, Ill., read a paper on "*Abdominal Section for the Relief of Intestinal Obstruction, due to Intussusception.*" The author first operated successfully August 23d, 1855. The case was one of ileo cæcal invagination in an adult.

Dr. Peck, of Iowa, reported a recent case, that promised well.

Dr. Hallev, of Kansas City, reported two cases, both of whom died, but he, nevertheless, considers it a justifiable operation when per formed early.

Dr. Lee, of Chicago, advocated early operation, and said that in making a diagnosis too much reliance must not be placed on the pulse and temperature, because in some of the gravest cases they are undisturbed.

Dr. Gay, of Buffalo, read a paper on "*Anchylosis of the Hip in the Straight Position.*" He discussed the two surgical measures of treatment, subcutaneous osteotomy and fracture, the latter of which he regards most favorably. This paper elicited much discussion, and the opinion of the Section was about equally divided as to the merits of the two measures mentioned.

Dr. Jos. H Warren, of Boston, read a paper on "*A New Truss to be Applied after the Radical Cure of Hernia.*" The truss consists of a concave wire gauze pad, with more gentle springs than usual. The pad is surrounded with a rim of tubing and a bridge of tubing extended across to strengthen it. It draws the pillars of the hernial rings together.

WEDNESDAY, JUNE 7.

Dr. J. F. Stewart, of Peoria, Ill., presented a *Splint for Fracture of the Elbow.* It was a wooden hinge splint, with steel side rod and adjusting screw, and the author claimed that it is applicable to all forms of fracture of this joint.

Dr. George W. Nesbitt, of Sycamore, Ill., followed with a paper on "*Ununited Fracture of the Femur Treated by Exercise.*" He reported a case in which union failed to take place and was not secured until the limb was put in a plaster-of-paris splint, and the patient compelled to walk without crutches, all other means having proved useless. Several similar cases were reported in the discussion which followed. Dr. L. A. Sayre, of New York, advised that the plaster-of-paris splint be applied at once, for he had never seen a case in which it had done harm when properly applied and carefully watched; if, however, swelling had occurred before he reached the patient he would wait until it had subsided.

Dr. John L. Atlee, of Lancaster, Pa., spoke of the advantage of placing woolen fabrics next the skin before applying the plaster bandages.

THURSDAY. JUNE 8.

Dr. Jos. Ransohoff, of Cincinnati, read a paper entitled "*Contribution to the Surgery of the Liver.*" The paper consisted in the recital of two cases. The first, one of hepatic calculi, where he had opened the abdomen, cut into the gall bladder and removed the calculi. The wall of the gall bladder was stitched to the abdominal wall before the former was opened. The incisions were made with the galvano-cautery, in order to avoid hemorrhage. The second was one of hepatic abscess, in which repeated aspirations did no good. The abdominal cavity was opened, the wall of the abscess stitched to the abdominal parietes, the sac opened, washed out by a constant stream of water and several large sloughs removed. The result was good.

Dr. Edmund Andrews, of Chicago, read a paper on "*The Proper Points for Incision in the Drainage of Suppurating Knee Joints.*" The anatomy of the knee joint was reviewed. Dr. Andrews said there were three cavities: 1, the submuscular bursa; 2, the supra-patellar; and 3, the infra-patellar. Into these an incision was made upon each side, and short drainage-tubes introduced from each direction. There were eight points of incision referred to in order to make the drainage complete; two, one on each side of the bursa; two, one on either side of the supra-patellar expansion; two, one on each side near the posterior part of the joint; and two, one on either side of the ligamentum patella.

Dr. Byrd, the Chairman, read a lengthy paper on "*Excision of the Intestinal Canal when Covered with Peritoneum.*" The author sums up the whole subject as follows:—

First.—Resections of the small intestine may be done to a considerable extent without interfering in any appreciable degree with digestion.

Second.—Practiced under suitable conditions the operation is to be considered perfectly legitimate.

Third.—The resection may be performed by bringing the divided ends directly into apposition and closing the abdominal wound, by forming an artificial anus. The second and third procedure expose to less subsequent danger.

Fourth.—Resections of fibrous and cicatricial structure, which are probably more frequent than is generally supposed, may cause a radical cure, and the same is the case with epithelioma. On the contrary, resection of cancerous obstructions gives only temporary relief, and at a greater risk.

Fifth.—By proper diet after the operation the risk of fecal extravasation may be reduced to a minimum, and the best diet for this purpose is one containing as little fluid as possible.

Sixth.—By introducing liquids per anum, and drink in the same way, water is absorbed as by the mouth, and there is no sense of thirst; the flow of intestinal fluids is less, considerably, and the patient is more comfortable.

This paper gave rise to much discussion, after which the Section adjourned.

Section in State Medicine.

This Section organized with Dr. A. L. Gihon, United States Navy, as Chairman, and Dr. J. H. Sears, of Waco, Texas, Secretary.

A discussion took place upon vaccine virus, without any result.

Dr. John G. Lee, of Philadelphia, then read a paper on "*Suicide in the City and County of Philadelphia during the last Decade.*" From December 31st, 1871, to January 1st, 1881, the proportion of suicides to the total number of Coroner's inquests was 53 to 1000. Suicide occurred most frequently among the married of both sexes. The greatest number were between the ages of thirty and fifty years. The methods of suicide in 636 cases were: hanging, 119 males, 22 females; shooting, 114 males, 8 females; laudanum, 79 males, 17 females: cutting throat, 70 males, 13 females; drowning, 46 males, 11 females; arsenic, 11 males, 8 females; the remainder took their lives in various ways.

Dr. Smith, of the United States Army, followed with a paper on "*Sickness and Mortality in the Army,*" the salient points of which are as follows.

The paper opens with two questions:—

1st. Has State Medicine progressed within the past few years?

2d. Has its progress been marked by a diminution of disease and death?

His answers are made up from an analysis of the Surgeon General's reports of disease and death in the army, from 1871–1881, both inclusive. Every man in the army was sick over one and one half times per year, on an average, since the sick rate per year was 1598 per 1000. The death-rate was 8.71 per 1000 of mean strength per year, while the death rate for the sick was 4.63 per 1000. The sickness among the white and colored troops was as 1551 of the former to 1498 of the latter, while deaths were as 845 white to 1104 colored. These statistics seem to show an advance in army sanitation and therapeutics in the past eleven years. Fewer men, in proportion, are now taken sick; fewer men now die than were taken sick and did die eleven years ago.

"*Expert Medical Testimony*" was then brought before the Section, and was fully discussed.

Dr. Hibbard offered the following resolutions, which were adopted and referred to the Association in general session.

Resolved, That the Section of State Medicine deems it advisable, and more conducive to the ends of justice, that medical men called as expert witnesses should be subpœnaed directly by the court, instead of, as now, by either side.

The temperance resolutions presented to the Association in general session, and referred to the Section on State Medicine, now came up for discussion, and finally the following resolutions were adopted:—

Resolved, That in view of the alarming prevalence and ill effects of intemperance, with which none are so familiar as members of the medical profession, and which have called forth from eminent practitioners the voice of warning to the people of Great Britain concerning the use of alcoholic beverages, we the undersigned members of the medical profession of the United States unite in the declaration that we believe alcohol should be classed with other powerful drugs; that when prescribed, it should be done with conscientious caution and a sense of great responsibility.

Resolved, That we are of the opinion that the use of alcoholic liquors as a beverage is productive of a large amount of physical and mental disease; that it entails diseased appetites and enfeebled constitutions upon offspring, and that it is the cause of a large percentage of the crime and pauperism of our cities and country.

Resolved, That we would welcome any change in public sentiment that would confine the use of intoxicating liquor to the uses of science, art, and medicine.

Dr. C. M. Hughes, of St. Louis, followed with a paper on the "*Rights of the Insane.*" He maintained that the insane are entitled to medical inquiry by medical methods. He believed that the criminal insane should be confined for life, and be prevented from extending their disease to posterity. At the close of this paper the Section adjourned.

Section on Ophthalmology, Otology, and Laryngology.

TUESDAY, JUNE 6.

This Section met at Market Hall.

At the annual meeting of the American Medical Association, held at Chicago, in 1877, Drs. Reynolds, of Louisville, and Scott, of Cleveland, introduced a resolution providing for the organization of a Section on the above-named subjects. The following year the organization was completed by the election of Dr. Herman Knapp, of New York, as Chairman, and Dr. X. C. Scott, of Cleveland, as Secretary. The officers for the present year are Dr. D. B. St. John Roosa, of New York, Chairman, and Dr. S. Cohen, of Philadelphia, Secretary. In the absence of the Chairman, Dr. Cohen called the meeting to order. Prof. S. B. Jones, of the Chicago Medical College, was elected Chairman. At his own request, Dr. Cohen was excused from the duties of Secretary, and Dr. Carl Seiler, of Philadelphia, was chosen to fill the position.

Dr. W. Porter, of St. Louis, then read an interesting paper on "*Recurrent Pharyngeal Hemorrhage.*" He related two cases, in which there were evidences of incipient phthisis. The bleeding was slight, but oft repeated. In both cases the hemorrhage was found to come from the tonsillar arteries, and was readily controlled by styptic applications. These cases teach the lesson that, in all cases of supposed hæmoptysis, the larynx and pharynx should be carefully examined.

Dr. Carl Seiler, of Philadelphia, had seen

three cases in which bleeding from the upper pharynx and naso-pharynx had been mistaken, by the patient himself, and by others, for bleeding from the lungs.

This paper gave rise to some discussion, after which Dr. X. C. Scott, of Cleveland, made some remarks on the "*Use of Powdered Iodoform in the Treatment of Diphtheritic Conjunctivitis.*" He applied the iodoform to the surface in fine powder, once a day, and since commencing this treatment has not lost a case.

Dr. Porter found it very beneficial in syphilitic ulceration of the skin of the nose.

Dr. Seiler thought it a very valuable drug, but had been utterly unable to permanently destroy its odor, and was, therefore, compelled to abandon its use.

WEDNESDAY, JUNE 7.

Dr. Seiler, of Philadelphia, exhibited some galvano cautery instruments for operations in the larynx, pharynx and nasal cavities. He has substituted vulcanized fibre for silk, as an insulator on the conducting wire, because the silk is apt to be burned off by the heat generated in the wires, thus allowing the heated wire to scorch parts that are not intended to be touched.

Dr. Calhoun, of Atlanta, reported a case of "*Accidental Vaccination of the Eye,*" occurring in a little boy, who, having gotten some virus from a vaccine pustule on his fingers, subsequently scratched his eye. The cornea was destroyed.

Dr. Johnson, of Peoria, reported a case of "*Dislocation of the Lens Under the Conjunctiva*" from traumatism.

Dr. Connor, of Detroit, reported a case of "*Tumor on the Base of the Skull.*" The first symptoms noticed were gradual loss of hearing and vision on the affected side. The patient died, and a large tumor was found on the base of the skull, which had caused absorption of the contiguous brain tissue, up to the optic thalamus, which was destroyed. Interesting cases were related by Drs. Agnew, of New York, and Johnson, of Chicago.

THURSDAY, JUNE 8.

Dr. Turnbull presented a paper on "*Hearing in Children,*" which was read by title.

Dr. H. G. Young then opened the discussion on "*Communicable Eye Diseases,*" which was participated in by Drs. Hazen, Smythe, Johnson, Connor, Jones and Dyer. Dr. Dyer offered the following resolution:—

Resolved, That a committee of three be appointed to consult as to the best means of bringing reliable information before the public, with a view of preventing the spread of communicable eye diseases. The chair then appointed Dr. Jones, of Chicago; Dr. Dyer, of Pittsburgh, and Dr. Connor, of Detroit, as the committee to report at the next meeting. The session then adjourned.

Section on Diseases of Children.

This Section organized with Dr. William Lee, of Baltimore, as Chairman, and Dr. E. C. Miller, of Iowa, Secretary. Dr. N. S. Davis, of Chicago, read a paper on "*The Means of Lessening the Mortality of Infants from Bowel Affections.*" This lengthy address was so full of interest that it deserves a somewhat full report. The speaker said that the importance of this subject cannot be over-estimated when we remember that one-third of the human race die under five years of age, and that a large percentage of these deaths are due to bowel complaints. Food, drainage, ventilation, etc., are under our control, but there are certain conditions that are not. Thus meteorological conditions of the atmosphere, whether they refer to impurities, sudden changes, or waves of continuous high or low temperature, are not under our control and yet we can do much to mitigate their evil effects Most recent writers class cases of serous diarrhœa and cholera morbus in children under two years of age, under the name of catarrhal gastro-enteritis, and while they state that these diseases are most common during the warm months, they give as causes, improper feeding, impure and changed milk, impure air, teething and over-worked, badly fed, and unhealthy mothers. Dr. Davis says that bad milk and food are prevalent in all communities during the winter as well as the summer. Children cut their teeth in December as well as in July, and unhealthy mothers exist at all times of the year. If any of these causes produced cholera infantum it would be frequent at all times. Statistics demonstrate that the prevalence of all grades of these two diseases are almost restricted to the period between the last week in June and the last week in September. In Chicago, in 1872, the records show, 8 deaths in April, 6 in May, 23 in June, 246 in July, 163 in August, 69 in September, 13 in October, and 2 during the rest of the year. Other years show the same results. The diseases prevail very little in cities where the change in temperature from the warmest days of summer to the coldest days of winter is very slight, and where sea breezes and other causes make the nights cool. The milk distributed in San Francisco and New Orleans is the same as that in Boston and Chicago, and the nursing mothers are no more free from mental and physical infirmities. Statistics show a ratio of only about five deaths from cholera infantum annually, for every 10,000 inhabitants in San Francisco, seven in New Orleans, twenty-five in Boston, and thirty in Chicago. There must, therefore, be some cause not common in all large cities. A record of the disease and coincident meteorological observations were carried on for three years in Cairo, Davenport, and Omaha. The reports of these observations, published some years ago, showed:—

First.—That the prevalence of the affections under consideration is limited principally to July, August and September, commencing with the first wave of high atmospheric heat that continues days and nights for more than five days, which, in the latitude of Chicago, is sometimes the last week of June, but more frequently the first week in July, and continues more or less during the succeeding ninety days.

Second.—That while the deaths from these affections in any city or given community will be nearly the same in the two first months after they begin in July and August, the date of the initial symptoms or beginning of the disease, in three-fourths of all the cases, will be in July, very few originating after the first of August. Many cases commencing in July continue until the months

of August or September, causing wasting and death.

Third.—That it is not simply high or extreme heat, of temporary duration, such as that of a single day, or any number of days, with cool nights, which favors the development of the disease, but continuous high temperature, day and night, for several days; and if, in addition to the heat, the air be stagnant, from lack of winds or obstructions, as in large cities, or from defective ventilation, the effect is greatly increased. This explains why these affections are more numerous and fatal in cities than in rural districts, and why they prevail so little in even large cities located in warm climates, provided the location be such as to afford cool breezes at night.

Fourth.—That while the great majority of attacks which occur in any given summer are found to have their beginning in July, or during the first thirty or forty days after the first wave of protracted high temperature for the season, they are not equally distributed over the whole of the month.

We have the physical law that the higher the temperature of the air the rarer it becomes and the less oxygen is contained in it, therefore one breathing at a high temperature would receive less oxygen than at a low temperature. Stagnant air becomes more rapidly exhausted than that which is moving, and the physical law of expansion by increase applies to the living as well as to dead matter; consequently high heat tends to increase the distance from each other of the atoms of the human body, thereby lessening the force of vital affinity and increasing the susceptibility to impressions. The capacity of the blood for taking up oxygen depends greatly upon the quantity of saline ingredients it contains, and under a continuous high temperature the cutaneous exhalation is so great that the blood becomes depleted of these ingredients. Colitis and recto-colitis seldom occur until late in the season, when warm days are followed by cool nights. If these premises are correct, it follows that our efforts to lessen mortality from these diseases must be directed toward securing for young children a better supply of fresh, pure air, for increasing the oxygenation and decarbonization of the blood, maintaining the activity of the vaso-motor system, and counteracting the effect of high temperature by increasing the general tonicity and lessening the excitability of the tissues. To secure these conditions he recommends better ventilation of dwellings and especially nurseries and sleeping rooms, during the warmest parts of the summer. The sending of young children from densely populated districts to moderately elevated country locations or to floating hospitals, receiving ships or large bodies of water during the period of special high temperature. *The judicious use of the sponge bath.* Whenever the system is relaxed and rendered morbidly sensitive by continuous high temperature, causing the infant to be languid, restless, and sometimes pale, a free sponging of the whole surface with water, as cool as is comfortable, always produces an invigorating influence, which will last from six to twelve hours. It is well known to every careful observer that a large majority of all the attacks of this disease show their first beginning during the last half of the night or early morning, owing to the long continuance of high temperature and the confined air of the night. The increased tone of the whole vascular system produced by a sponge bath at bedtime would enable thousands of these little sufferers to pass the whole night unharmed, when without it the dread weakness would begin.

This interesting and valuable paper was followed by one read by Dr. William Lee, of Baltimore, on "*Observations on Rickets*," which elicited much discussion, after which the Section adjourned.

Section in Oral and Dental Surgery.

TUESDAY, JUNE 6.

The Section organized with Dr. D. H. Goodwillie, of New York, as Chairman, and Dr. Truman G. Brophy, of Chicago, Secretary.

Dr. William D. Kempton, of Cincinnati, read a paper on "*Oral Hygiene.*" He said that the profession is indebted to specialists for many, if not most of the important discoveries. Oral hygiene was very important, and the results of its neglect manifold. Many of the cases of headache, earache, affections of the eye and stomach, are oftentimes directly traceable to badly decayed teeth. The paper closed with directions for the preservation of teeth, and the speaker strongly urged physicians to impress upon their patients the necessity of care of the teeth.

During the lengthy discussion which this paper elicited, Dr. Allport made the remark that our food should be taken as nearly as possible in the condition in which God has prepared it. He stated that the so-called patent process of making flour eradicated much of the phosphate in the wheat, and remarked that the enamel of the teeth is composed mainly of phosphate of lime. After the discussion terminated the Section adjourned for the day.

WEDNESDAY, JUNE 7.

"*Heredity in Dental Development*" was illustrated by the report of a case by Dr. W. C. Barrett, of New York. After which, Dr. J. S. Marshall, of Syracuse, N. Y., read a paper on "*The Need of Dental and Oral Surgeons in the Army and Navy.*" Attempts have been made at various times, in Congress, to secure legislation toward accomplishing this result, but nothing has yet come of it, save the appointment of a dental surgeon at the Naval Academy, at Annapolis. Soldiers on the frontier, and sailors on a long cruise have no opportunity to have their teeth attended to. The objection always urged to such appointments was the small number of men requiring dental treatment. Statistics were quoted to show the fallacy of this argument. The paper closed with the recommendation that a committee be appointed to arrange a statistical report of all dental and oral diseases, and request the surgeons-general of the Army and Navy to incorporate them in their regular reports. This address elicited much discussion, and finally, the following resolution, offered by Dr. Allport, was adopted: That a committee of three be appointed, who, in connection with Dr. Maynard, of Washington City, and the surgeons-general of the Army and Navy, should make what efforts

they deemed advisable regarding the appointment of dental and oral surgeons in the Army and Navy, and to report to the Association next year." Drs. Allport, Williams and Marshall were appointed the committee. Dr. Lawrence, of New York City, offered a resolution calling for the appointment of a committee to consider the subject of food, including insalivation, mastication, digestion and assimilation, in its relation to the development of the different tissues and organs of the body. Drs. Lawrence, Kempton and Talbot were named the committee. The Section then adjourned for the day.

THURSDAY, JUNE 8.

Dr. Goodwillie presented wax models of three cases of necrosis from arsenic. In one case there were abscesses in the superior maxillary bone at nearly all the teeth, caused by applying arsenic to destroy sensibility of the dentine before plugging the teeth.

Dr. Eugene S. Talbot, of Chicago, followed with a paper on "*The Injurious Effects of Mercury as Used in Dentistry.*" He thought there could be no doubt that amalgam fillings in teeth will sooner or later produce mercurial poisoning, though years may sometimes elapse before the injurious effects are felt. He related two cases in which the symptoms of mercurial poisoning were well marked. The amalgam fillings were removed, gutta percha inserted, and subsequently the teeth were plugged with gold, when all toxic symptoms disappeared. He concludes, from experiments, that mercurial vapors are given off from amalgam fillings at all ages, and from all varieties: even in sixteen year old fillings the vaporization was sufficient to respond to chemical tests; that mercury, when inhaled into the lungs is far more active than when taken into the stomach; and that physicians, when treating dyspeptics, anæmics and persons suffering from nervous debility, would do well to examine the mouths of patients, to see if artificial teeth on red rubber, or pluggings of natural teeth, may not have some compound of mercury in their composition.

Dr. W. W. Allport, of Chicago, followed with a lengthy paper entitled "*How Dentists Should be Educated.*" He claims that the dentist should be educated both in mechanical dentistry and oral surgery. The oral surgeon who desires success, must have a complete medical education, coupled with a special knowledge of dental surgery. He concluded by saying that all dental and oral surgeons should, having primarily received a medical education, become legitimate specialists in its practice, and all medical graduates should be thoroughly instructed concerning diseases of the teeth.

Dr. J. B. Lawrence, of New York, followed with a paper on "*Medico-Dental Science,*" after which the Section finally adjourned.

Can Dreams be Controlled?

The *Lancet* says that a French investigator, M. Delaunay, finds, from experiments upon himself, that the character of his dreaming may be controlled by stimulating various portions of the brain by means of heat. By covering his forehead with a layer of wadding he gets sane, intelligent dreams. He has also experimented on modes of lying, which favor the flow of blood to particular parts, increasing their nutrition and functional activity. He has observed that the dreams he has while lying upon his back are sensorial, variegated, luxurious. Those experienced when on the right side are mobile, full of exaggeration, absurd, and refer to old matters; but those produced when on the left side are intelligent and reasonable, and relate to recent matters; in these dreams one often speaks. These observations may be correct, so far as M. Delaunay is concerned, but most people who venture to lie on their back, especially after eating, are apt to find their dreams anything but luxurious.

Death from Chloroform.

A death recently occurred in Charleston, S. C., under circumstances that plainly demonstrate the danger of administering chloroform unassisted. A woman was to be operated upon, and the surgeon took with him two assistants. She refused to allow them in the room. The operator told them to wait in the parlor until she was chloroformed and he would then admit them. Upon admission one of the physicians was asked to look after the chloroform; he placed his finger on the radial and found the woman pulseless; she was dead. All efforts at resuscitation were unavailing.

Medical Experts.

A medical expert called for the defense in the recent celebrated Malley case, was asked by the prosecuting attorney, "Have you not written plays for the stage?" "Yes sir." The attorney, with a deprecating shrug, looked toward the jury and sneered, as though to say, "You can plainly see how little this man's evidence will be worth, when he has sunk so low." Experts beware; not of the respectable stage or of its literature, but of this cynical New England attorney.

Items.

—Professor Henry J. Bigelow has resigned the Chair of Surgery in Harvard University. He has been connected with the school for thirty-three years.

—Virchow defines *tubercle* as "a neoplasm, which takes its origin from the connective tissue, in the form of nodules, consisting of closely packed cells."

—*Student.*—"How is it, Doctor, that I always take cold in my head!" *Doctor.*—"It is a well-known principle, sir, that a cold is most likely to settle in the weakest part."

—A quack doctor, on his death-bed, willed his property to a lunatic asylum, giving as a reason for so doing that he wished his fortune to go to the liberal class who had patronized him.

—Two physicians applied a galvanic battery to a colored boy in Richmond, Va., who was said to have been struck dumb for lying to his mother, and he quickly began to talk, in the most distinct and emphatic manner.

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Communications.

TREATMENT OF PLEURAL EFFUSIONS.

BY D. LONGAKER, M.D.,

Of Philadelphia.

The product of inflammation of serous membranes may be said to consist of fluid and cells; the varying relative quantities in which each of these is found constituting, when the pleura is the seat of the disease, respectively, fibrous, serous and purulent pleurisies.

It is not my object to enter into any discussion of the causative and pathological relations of these, but the treatment of certain conditions shall claim our attention, and these, the presence of a small, moderate, or large amount of effusion.

Where the effusion is small, or in other words, where it is a dry pleurisy, and on the other hand, where it is extensive, the indications are decided and positive. It is the instance of a moderate effusion which forms the debateable ground.

We often find, in the course of an autopsy, a firm adhesion, an organization of the parietal with the costal pleura, the result of inflammation, yet during life no signs were evident which would point to the existence of such trouble. This is found in phthisis, where the changes are subsequent to those in the parenchyma of the lungs, a wise provision of nature to avoid the danger of more serious accidents. It is also found under the same latent conditions where the lungs present no disease. What is the inference? Simply that a pleurisy, dry, has occasioned this condition, for it was not discovered at any time in the patient's history.

I think it may safely be inferred that a lung bound down by adhesions is not in the most favorable condition for the performance of its function; it certainly is not the original condition under which it acts in discharging its duty. Here, then, nature, ever conservative, interposes a fluid splint, separates the opposite inflamed surfaces, until the work of repair has gone on sufficiently to obviate the danger of adhesion, when the fluid is itself absorbed, and a perfect cure results. Opportune in this instance, the fluid effusion in another, owing to different casual circumstances, may, of itself, become a serious danger, because of its excessive amount. The flatness on percussion, the distant or entirely absent respiratory murmur, the increased frequency of the acts, it may be dyspnœa, either constant or paroxysmal, all tell that the working space of the respiratory apparatus is extensively encroached upon and urgently demands relief.

Simple pleural effusion, though large in amount, is usually looked upon as free from danger. Trousseau says "Pleurisy may be fatal, from the immediate effect of excessive effusion."

This tendency was well exemplified in a patient under my care a few months ago. She was twenty-four years of age, a poor woman with four children dependent upon herself for subsistence, was strong and apparently robust. In the early part of her illness she had frequently repeated chills, of short duration; there was a feeling of oppression about the chest, and the respirations were, at the same time, relatively decidedly increased in frequency; they were

about 34, with pulse 96–100, and her temperature at no time above 102° F. She was thought to be doing well under the means of treatment employed—locally various methods of counter-irritation, with such remedies, internally, as were calculated to promote absorption. The respirations continued frequent, the feeling of oppression remained, and she continued with little change in her condition, until about the end of the fifth week from the commencement of her illness, when I was hurriedly called one morning, with the statement that my patient's breathing had become very peculiar, and alarmed them much. After an unavoidably short delay, I hurried to her, just in time to see her expire. She had had a violent attack of dyspnœa, which only ended with her life. No autopsy was made, but the signs of accumulation of fluid in the right pleural cavity were unequivocal, and the amount was large.

Take *this* as the type of acute pleurisy in which paracentesis thoracis is indicated, and in which, had it been resorted to, it would have afforded a chance of saving life. Its applicability in such cases is indisputable, as the dangerous delay has shown, and it should have been early resorted to; the dyspnœa came as the herald of death, and it was then too late. Trousseau has pointed out this danger; he says, "To wait for the dyspnœa, as has been recommended, and as was formerly laid down by me as the rule, is to run the risk of allowing the time for operating to pass, and of letting the patient die, as I have done." Here pneumatic aspiration secures a positive end, that of prolonging life and of averting the imminent danger present in large serous effusions.

Where the effusion is less extensive no such danger is present, and it then becomes a more difficult matter to decide upon the propriety of this measure. These moderate effusions may be accompanied by slight general symptoms, or may be latent, or the symptoms of depression of the vital forces may be marked, the signs of a considerable amount of fluid in the pleura continue for an indefinite time, and then absorption take place, proceeding slowly, until finally, all the fluid is removed. The general symptoms, where such are marked, first improving. The extent of the flatness on percussion over the affected side, distant respiratory murmur, the displacement of neighboring viscera, all enable us to decide upon the extent of encroachment upon the lung, but what is of more importance in determining this is, the relative increase in the frequency of the respiratory acts. In a case at present under my care, a middle-aged man, the respirations at no time were above twenty-six to the minute, and pulse 96–100. Apex beat of heart felt half inch external to and one inch below the nipple. He is now in the fourth week of his illness, the general symptoms, not exceeding a feeling of depression and weakness, have all much improved; he expresses himself as feeling nearly well, the amount of effusion is lessening, the pulmonary resonance, returning in the upper portion of the chest, grows in extent each day, and at the same time the respirations grow less frequent, are now from 20–22, and his pulse 82 in the minute. With counter-irritation, rest and such internal remedies as promote absorption, this favorable course has been secured. Of the remedies used in this and another case, whose history I shall briefly narrate, the tincture of chloride of iron, highly commended by Anstie, certainly seems to have had a positive effect in promoting absorption. It was given, diluted, in ten minim doses, every three or four hours. The other case referred to was considerable serous effusion, following acute pneumonia.

Wm. McN., age 37, had been ill nine days before I saw him. He was very prostrate, delirious and restless, a small pulse, rusty sputa, and, at times, small quantities of blood were expectorated. His temperature then was 104°, F., and he was in a profuse perspiration. Hyper resonance, or a somewhat tympanitic resonance at the apex of the right lung, and dullness extending from below to a few inches of the clavicle. Owing to his prostrate, weak condition, not much beyond this was elicited by physical examination. Respirations were 36. Bronchial breathing and increased vocal fremitus indicated conclusively the nature of the trouble. In about seven days from the time he was first seen his condition was decidedly improved. His respirations were now 26. On careful examination, flatness on percussion was found over the whole of the right side posteriorly, and over the greater portion of the same side anteriorly. Diminished movement, the liver displaced downward and the apex beat toward the left axillary line, bronchial breathing, diminished vocal resonance, posteriorly ægophony, all unequivocal signs of fluid effusion. His prostration was still evident, nevertheless he gained somewhat in strength. His temperature, it is worthy of note, assumed a somewhat curious course; for the following two weeks it was always 100° F. in the morning, and rose in the evening to 102° F. This made me, with the other symptoms present, suspect the presence of puru-

lent fluid. He had slight chills and profuse perspiration. He was taking, however, large doses of the vegetable salts of potassium, acetate, etc. A resort to a very simple manœuvre, I do not remember where I saw the suggestion, tapping with a hypodermic needle, proved the fluid to be a clear, limpid serum. Though in this case the amount of effusion was considerable, there was no dyspnœa, the respirations being relatively very slightly increased. In about four weeks the fluid began to diminish after he had made a decided progress on the road to convalescence, and now, about seven weeks from the first onset of his illness, he is almost well. The amount of effusion is very small, and does not give him the slightest inconvenience. Let us consider the points in favor of and those against a resort to pneumatic aspiration in these cases. The general symptoms improve and the effusion is absorbed. Would withdrawal of the fluid abridge the duration of illness? We may remove the fluid, but it may reaccumulate. Is there danger that the fluid may become purulent, that might be averted by removal of it? I do not think either of these questions can be answered in the affirmative. Sometimes a serous effusion is removed by aspiration, and in a few days it becomes necessary to repeat the operation, and then pus instead of serum is found, the removal of fluid stirring up a fresh activity in the morbid process, and only fuel has been added to the flame. It has been asserted that considerable effusion becomes, as time passes on, more and more filled with corpuscles, until they are at last converted into pus. That this is not so in fact, was proved by the instance in which I withdrew fluid that had remained six weeks. Only a few lymphoid cells were found, in a clear, limpid fluid. Being not certain, then, that we do not invite an increased activity of disease by interference, I think we may conclude that aspiration fills only one object, that of removing serious and dangerous compression of the lung, and further that in it we do not possess the means whereby we may limit the length of time during which effusion in the pleura may remain, and that the only proper means to be used in effusions of moderate extent, which do not directly mean danger to life, are such general ones as we may use to influence its absorption. Among these, rest is of the utmost importance, the analogy beween an inflamed joint and an inflamed pleura being striking; in the latter the rest should be as complete as possible. It seems to me, to secure this end, Dr. Roberts, in his "Practice of Medicine," has given us a valuable hint, that of firmly strapping the affected side with adhesive plaster. He says, "I have found this mode of treatment decidedly efficacious in aiding toward the removal of moderate pleuritic effusions."

Should we meet with an effusion, either originally purulent or becoming so after a time, what is the proper plan of treatment? Hectic and emaciation, with prostration, show that life is in jeopardy unless prompt and radical relief is afforded. A case I had the honor of presenting before this Association a few weeks ago will illustrate this unfortunate complication. The patient, A., a young man, 18 years of age, was taken ill in the early part of June, 1881, with what was said to be pneumonia. This was accompanied by pleurisy; after an illness of ten days or two weeks, there was a decided improvement in his condition; he, however, did not sufficiently recover to leave his room; there were some vague sensations of discomfort about his chest, which continued for six or seven weeks, when he again began to fail; he grew weaker, had irregular, repeated chills, of short duration, and was, in short, very ill. Just ten weeks after the onset of his illness I first saw him, being Aug. 14, 1881. His appearance then was such as indicated extreme prostration, marked hectic, emaciation, a frequent, small pulse, and a constant cough, accompanied by expectoration of a large amount of purulent matter, one pint a day. The latter symptom had continued for a week, during which time he was said to have failed much, the constant cough preventing sleep and causing nausea, so that he loathed the sight of food. His temperature was 102° F. On physical examination it was evident that a considerable amount of fluid, presumably purulent, occupied the right pleural cavity. A hypodermic needle proved the inference to be correct. The next day a fistulous opening was made and a drainage-tube inserted. His improvement was at once noticeable, his temperature, taken before evacuating the fluid, was 102°; in the evening of that day it was about normal. Cough disappeared, his appetite returned, and his temperature for the next three weeks remained at about normal, with the exception of one day, when a slight obstruction in the tube stopped the flow of pus, when it arose in the evening to 101 F. (the injection of dilute iodine had also been omitted). He has steadily gained in weight and has grown quite tall during this time, and may be said to be slowly improving. His temperature, taken at various times of the day during the last month, does not

show any abnormal increase. There is dullness at the apex of the affected side. Dry râles are heard. Below the spine of the scapula, posteriorly and anteriorly below the third rib, respiratory murmur, though more feeble than on the opposite side, is heard. The fistula still exists; it is found to extend almost directly backward, in a plane parallel with the horizon when he is in the upright position, and between the seventh and eighth and sixth and seventh ribs, a little external to the right nipple. A soft catheter passes in eleven inches. It is narrow, and does not hold over an ounce of fluid, which is daily injected.

In this condition the pleural cavity constitutes the walls of an abscess, and the greatest hope of recovery exists in this radical measure; by it we obtain free exit for the contained matter and secure drainage. The cure is effected by granulations. Cicatricial tissue is developed, upon the contraction of which depends the retraction of the sides of the chest, which is shown to be due to an active force, and not, as was formerly supposed, to the passive influence of atmospheric pressure, which, being equal on both sides, is incapable of producing any such results.

In this connection it is of interest to quote the tabular analysis of Goodheart, Guy's Hospital Reports, 1877, given by Martindale (*American Journal of Medical Sciences*, "Empyema," July, 1881). It includes seventy-seven cases. In fifteen no treatment was used; there were two recoveries, both children; eleven pointed and discharged; there were two recoveries. The remainder, by the radical method, got well (incision and drainage tube). These, with my case, should certainly leave no doubt as to the relative advantages of a radical method of relief, as compared with any temporary means of relief that we may use instead.

THE NEW YORK CODE.

BY DR. R. C. M'EWEN, M.D.,*
Of Saratoga, N. Y.

Old things are passing away, and we are called to a newer life, in the adoption of a more liberal gospel; the professional spirit, so long hampered by the hidebound restrictions of a primitive ethical code, is to become regenerate, and the broad banner of legal enactment is raised as the standard of scientific qualification. The new code of medical ethics adopted by the Medical Society of the State of New York is now the subject of discussion within and without the profession. To the laity, who regard the science of medicine as founded upon some particular dogma, and each individual practitioner as the representative of a system, its liberality is hailed as evidence of advance, and we are considered to have broken the fetters that bound us; to have laid aside the bigotry and intolerance that paid so little deference to the more modern scientific methods, and, at last, to have granted them the recognition they deserve. The secular press has expressed its unqualified approbation, and the editorial pen pictured, in glowing terms, the benefit to all mankind that shall flow from the decease of an antiquated form, and the birth of a spirit more in accord with the liberal idea of the age, and the toleration that should characterize a truly progressive, scientific spirit.

The *new departure* is held up to professional favor by but a small portion of the medical journals of the country. Its champion is the *Medical Record*, of New York, a prominent journal at the reputed birthplace of this liberal doctrine, and, editorially, it has set forth its satisfaction with the independence of the position, and its expectation of the coming day when those who now see through a glass darkly will accord the honor due the pioneers in so magnanimous and so radical a reform.

But from the medical press at large and the profession itself, from Maine to California, comes forth an earnest protest against the action of our State Society, and a demand that at the coming meeting of the American Medical Association the profession shall make known its position by the exclusion of the delegates from our State Society from that body, by a repudiation of the leveling doctrines of the new laid code, and a re-assertion of continued adherence to the faith of our fathers, rather than recognize the claims of pseudo-science to equality of position; rather than accord to imposition the genuineness of truth, or raise the traders in a name to the level of honest and sincere representatives of scientific progress. The act of the State Society is a repudiation of a governing principle of the national body, and a departure, in the name of tolerance, from a wise conservatism that is opposed to professional affiliation with irregular practitioners. It gives to State law the precedence in determining who shall be recognized as entitled to practice, and admits the legally qualified (if such there be) to all that has been accorded the educated physician. It is a denial of all that scientific medicine has claimed for itself in the rejection of so-called systems of practice, and bows, in a spirit of mock sentimentality, to

* An address delivered before the Saratoga County Medical Society, by the President.

the fictions of science, apparently sustaining a fraud in order to pocket a fee. The action of our national body is looked forward to with anxiety, and we wait to learn whether the old and tried shall have passed away and we are to be left to the disintegration that will follow the new. For the old we do not claim perfection, but better that, with its conservative and protective barriers, than the chaos of so liberal a departure from all restrictive influence. It is claimed that the new-made code is begotten in the interest of the specialist, who, in the name of progressive liberality, seeks to enlarge the borders of his usefulness and the contents of his pocket-book; that it was passed by but a minority of the members of the State Society, and is in defiance of the wishes of the majority. If so, let it be repealed at the annual meeting in February next, and the seal of disapproval be placed upon the act of a minority who seek to honor the representatives of a scientific fiction, in order that they may promote individual interest. It is idle to discuss the question of benefit to mankind from consultations with irregular practitioners.

The patient, in his critical condition, cares not a fig for the refinements of pathology, or a professional agreement on questions of diagnosis. The differences between the claims of scientific medicine and the dogmas of the day are not to be reconciled while the patient waits, and the impassable gulf between the true and the false is not to be closed by a shaking of hands over the chasm, in the interest of a suffering humanity. The physician of the so-called *regular* profession is classified as belonging to the old school. Ethics and therapeutics are more particularly held up to adverse criticism, the one interfering with a liberality hailed as evidence of progress, the other considered as weighed down by the dust of age, and founded upon principles that will not bear the test of rational examination. That defects exist in the code, which disturb our relations to the so-called modern medicine, and that it demands revision and readaptation, may be conceded. But in what respect can the claim be sustained that the science of medicine of to day is in any sense a theory of the dead past, or that its principles rest upon foundations that have been superseded by newer light in the dilutions of infinitessimalism. We are reaching forth, from day to day, to better things, and walk in the light of new developments. The hand of science points to new discoveries, that are as strange in the medical world as are those in other branches of scientific pursuit. But they are not born of dogmas, they owe no allegiance to "similia similibus" or "contraria contrariis," and reflect no tenet of sect or practice of schools. They stand on the broad basis of inductive science, and are the rounds of the scientific ladder upon which we rest, reaching out toward further development and greater practical results for the benefit of mankind.

A knowledge of anatomy was essential to progressive medicine, and the history of its rise and development, is coincident with more scientific modes of thought and study. Physiological investigation followed the better knowledge of form and structural arrangement, and the light shed upon the vital processes through physiological anatomy, enabled the pathologist to understand more clearly the changes in intimate structure incident to the various departures from normal condition that constitute disease.

The history of medical science, as it portrays the brilliant labors of the past, presents a page that brightens with each advancing age. We treasure up the heritage left us. The ties of tradition are not severed, but new horizons are opened up to our view, and in the light of the past we search for further knowledge from the standpoint of the present. By way of illustration, let me point you to the experiments of Pasteur, and their bearing upon the germ theory of disease. That we are surrounded by invisible germs, capable, under favoring circumstances, of producing disease and death, is no longer a theoretical view of our pathological relations. The mode and manner of their production in the animal and vegetable world, the laws which govern their vitality, the circumstances which modify the intensity of their action, and the relation various forms bear one to the other, are still subjects of investigation.

As remarkable as any of the developments recently brought forward are those set forth in the paper recently read by Dr. Koch, before the Physiological Society at Berlin, claiming to have discovered a specific germ as the cause of pulmonary tuberculosis. He endeavors to prove the truth of his views by the test of inoculation with a ferment containing the germ or bacillus tuberculosis, and as a result of such experimentation asserts the contagious and infectious nature of the disease. What a departure is this from the theory of blood dyscrasia and the deposition of gray tubercular matter, as set forth by the German pathologists, from the caseous degeneration of Niemeyer, or the more recent view of catarrhal inflammation, with its infecting foci of disease in a subject already scrofulous. We have mentioned these

investigations in illustration of that spirit abroad in the science of medicine seeking to know and develop the things that lie beyond the horizon that now limits our view. A spirit that pervades and leavens the professional body, raising it above the isms and pathies of the day, pointing us backward to the landmarks of scientific investigation that were progressive steps in the past, giving us the practical certainties of to-day, surer foundation stones than the innovations of so-called modern scientific medicine.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

NIGHT TERRORS OF CHILDREN; RENAL CALCULUS; PYELITIS.

Gentlemen:—The first case that I shall show you to-day is this little boy. I do not know his history, but I shall ask the father a few questions, and you can note the answers.

He is three years old; the third of four children; the others are living and healthy; the father and mother are healthy; the mother is somewhat nervous; the child was healthy when born; neither this child nor the others were nursed at the breast; the child grew well but did not develop rapidly; he was twenty-two months old before the teeth began to appear, and he still lacks one. Examining the mouth, I see that the teeth are well developed but rather peculiar in shape, showing a want of development of one lobe of some of the teeth. This affects chiefly the molars, which are curiously shaped and pointed. The lower right lateral incisor has never appeared. His dentition, then, has been singularly irregular, retarded, and is still imperfect. In other respects he looks like a sturdy child. The head shows no signs of rickets nor of hydrocephalus. The features are well developed. He eats well. The bowels are now regular. During his first and second summer he had sharp attacks of cholera infantum. The abdomen is somewhat prominent. The abdominal walls are quite fat. There is no enlargement of the liver nor of the spleen. There is no distention of the abdominal veins, but there is an unusually thick deposit of fat for so young a child. A great deal of the prominence of the abdomen depends upon this fat, while there is only that degree of distention of the intestine depending on the imperfect development of the muscular layer of the intestinal wall, that we constantly meet with. You frequently see bellies as large as this in children who have been disposed to diarrhœal trouble during dentition.

Recently we have had nerve symptoms developing. He first began to have nervous attacks four weeks ago. The father states that he was awakened at midnight by his wife, and found the child rolling its eyes, and also noticed some contortion of the body. There seemed to be some unconsciousness, for the child did not reply to the questions put to him. He soon came to, and then went into another attack of the same character. This lasted for two or three hours, and finally stopped after the child's feet had been soaked in strong mustard water. In one of these attacks he cried out, "See there! there! there!" and in moving around he caught hold of his father's hand, and immediately began to cry and scream, as though he had touched the dreaded object. He has had two of these night attacks. The last one did not last as long as the first.

In addition to the night spells the boy has had day terrors; that is, he will, while playing, quit his play, run to his mother, seem frightened, and say that something is after him. He never says what it is, excepting at the last spell, when he said that there was a man up stairs who was going to hurt him. At these times he does not work his body, and the parents do not notice anything strange about his appearance. He does not seem to lose consciousness. He does not cry out. When his mother reassures him, the spell soon passes away, and he returns to his play. The railroad runs a short distance from the house, but the father thinks that the child was never frightened by the locomotive, nor in any other way. Once, when a train went by, he said that it was going to run over him.

This is an unusual case. You are probably all familiar with what are termed night terrors in children. They are spoken of as night horrors, and as nightmare. The best term is night terrors, which explains them exactly. They are most common in children, but I have known them to extend beyond childhood, even into adult life, but I have never known them to come on in adults who had not, as children, suffered from the disease. Although they occcur most frequently during the night, they may also occur during the day. Their characters are rather uniform. I shall describe the commonest sort. A child who has apparently been well, but perhaps a little irritable and peevish, is put to bed and goes to sleep as usual, but wakes up in the earlier part of the night, say about ten or eleven o'clock. Generally the first thing that attracts attention are cries, incoherent screams and strong expressions of terror from the child's sleeping room. On running there, the child is found, nearly always, in some unnatural position, rarely lying still, but sitting up, or standing, looking very much frightened, holding itself in a strained attitude, screaming, sometimes incoherently, but at other times with a definite purpose, as; "Take that big black dog away!" or "That snake is going to sting me!" or "That man has a knife to cut me!" and the like; or the child may simply cry and scream, evidently in great terror, but without any coherent purpose. You call the child and shake him, but it produces no effect. The child is beyond the reach of reason, and does not seem to hear. Often the eyes are wide open and staring, but you cannot attract the child's attention. Holding the child seems to increase the terror, the child thinking that the

dreaded object has seized him, thus showing complete want of recognition of the nurse or parents. After a few moments, simply seeing that the child does not hurt himself, speaking gently, without touching him, the child begins to take long breaths, and very often says that there is nothing the matter, throws himself down, and almost immediately goes to sleep. Others will, after they come to, say "Where am I?" be somewhat nervous, but with a little soothing, lie down and soon go to sleep. There is not usually a second attack during the same night, but there is apt to be a recurrence of the attack at longer or shorter intervals.

I have seen attacks similar to this take place in the daytime. I remember a case that I saw last September, during the very hot weather. A child, eight or nine years old, of delicate nervous organization, and precocious intellectual development, rather frail, who had been subject to gastric catarrh, with frequent vomiting, lasting for several years, and for whom it had been found difficult to select a suitable diet, had been sent to the seashore. On the trip home she seemed excitable and nervous, talked incoherently, and seemed greatly afraid that an accident might occur. Reaching this city, she was taken to her residence, and very soon she suddenly went into a state of uncontrollable terror. I saw her a short time afterwards. Her body was bathed with sweat, she had torn off most of her clothing, she was trembling violently, and it was with great difficulty that she could be restrained from throwing herself on the floor. When the paroxysms would come on, she would exhibit great dread that a large dog would bite her. Some time previously she had been much interested in a large dog. At these times it was almost impossible for me or her father to hold her. She would tear the clothes from herself and those who held her. During these spells she seemed entirely inaccessible to calls, persuasion, or soothing. These attacks, under the influence of remedies and soothing treatment, gradually diminished, and on the following day she was herself again. I had never before seen as bad a case of day terrors, associated with prolonged hallucinations and delirious spasms, as the one I have described, but I have seen a number of cases where the terror occurred during the day. These attacks you will find, for the most part, connected with derangement of the digestion, and an over-sensitive, nervous system. You will ordinarily find them occurring in children with an excitable state of the nervous system, derived from the parents, or due to the depressing effects of severe illness or defective nutrition. In addition to the state of the nervous system we have, as a rule, local irritation, for the most part connected with the gastro-intestinal canal. Overeating, or an indigestible meal, will bring on night terrors in a child so disposed. So, in the case of which I have spoken, there had been a long continued gastric derangement, and the diet had not been properly regulated. Irritation of the genito-urinary canal may bring on an attack, and sometimes they come on after some excitement, fatigue, application to study, and the like.

These attacks are in some cases analogous to one of the types of hysteria. In other cases they are analogous to epileptiform seizures. There is considerable irregular muscular movement, and, for a moment, there is a form of unconsciouness. The attack passes over and the child sinks into a deep sleep. There is not the frothing at the mouth, the biting of the tongue, nor the true convulsive movements, *i. e.*, incoherent involuntary contraction of the muscles, that we see in true epilepsy, but I have said enough to indicate the analogy.

With this much as a preface, you will, in reference to the present case, see how difficult it is to define the nature of the attacks. For instance, the day attacks are very peculiar. They seem to be the result of some fright that this child has had. It is not improbable that the child has been frightened by the cars or the loud blowing of the whistle. Of course, if the child had been of a vigorous nature this would have had no effect. The terror may often be produced by excitement in playing, or by fatigue, or by reflex irritation from overloading the stomach, or by injudicious food.

We might think that these day attacks were attacks of petit mal. Lesser epilepsy sometimes takes this form. There is in this disease an instantaneous, giddy, disagreeable feeling, the person grasps something or lies down, draws a few breaths, and the attack passes over. If such a spell occurred in a child we can easily understand that it would cause a feeling of terror in the child, it would run to its mother, and by that time be apparently well. It is, therefore, doubtful, I think, whether these are attacks of terror or attacks of petit mal. The nocturnal attacks much more simulate a modification of epilepsy than ordinary night terrors. This child goes to bed and awakes with a scream. On going to him he is found in a somewhat convulsive state, with momentary unconsciousness. A convulsive condition of the muscles is not common in night terror. This child passes from one attack to another, each spell closely simulating the previous one. On the first occasion they lasted for several hours. During these attacks the child seems to be very much frightened.

I think that it is possible to explain the night seizures as attacks of night terrors, although exhibiting unusual features, and the day attacks may be peculiar expressions of some condition of over sensitiveness of the nervous system, with past frights in which very trifling causes bring on momentary terror.

As to the Treatment.—The tongue is moist and coated. The bowels are somewhat irregular. He sleeps well. His diet consists principally of bread, butter, soft-boiled eggs, and weak coffee. It is now two weeks since the last night attack. During the last ten days he has had only one day attack. Previous to that he had them every day. I should, in the treatment of this case, first endeavor to regulate the diet. I should not give coffee under any circmstances, but urge the child to take milk diluted with an equal quantity of water; I should allow him a soft-boiled egg, once a day, meat, roast potatoes, fine grits, bread and butter, and milk and water.

Direct Medication.—I think, taking the history in connection with the symptoms, that we have

had, undoubtedly, a long continued irritation of the stomach and bowels, an exaggerated sensibility of the nervous system, and from some cause, a defective state of nutrition, a defective developmental power. I should give him a teaspoonful of the emulsion of cod-liver oil and hyposulphites after meals. I should then use one of two sorts of remedies. Either remedies directed to the nervous system, and of these, I should select one of two, either the bromides by the mouth, or quinine and assafœtida by the rectum. I should give a suppository containing—

Quinia sulphatis ·
Assafœtida āā gr. iss.

or, if this irritated the bowel, it would have to be omitted, and I should give—

Potassii bromidi
Sodii bromidi āā gr. iss.

in a little calisaya elixir, three times a day, between meals, or, in the second place, if I found, under close observation, that this child's digestion was not right, that the stools were broken, irregular in color, and imperfectly digested, and that there was a good deal of flatulent distention of the bowel, I should not give the remedies of which I have spoken, unless, perhaps, a little quinine and assafœtida at night, but I should give remedies directed to the mucous membrane of the stomach and bowels. These would be either pepsin and bismuth, or oxide of silver. This is the class of cases, either of spasmodic nervous trouble or of epilepsy associated with gastro intestinal irritability, where the salts of silver have earned their reputation ; nitrate of silver is considered by the laity as one of the most reliable remedies in the treatment of epilepsy. Nearly all the cases, if not all, that have been cured by this drug, have been cases in which the attacks have been reflex from irritation of the gastro intestinal mucous membrane. If this child, on careful examination, presents evidences of a long-continued subacute irritation of the stomach and bowels, I should give from one-twelfth to one-eighth of a grain of oxide of silver in a small pill, or else one-twenty-fourth grain of nitrate of silver in solution. With this I should give the cod-liver oil, regulate the diet, keep him where he would not be frightened by the cars, and be very careful that he did not get over-fatigued or excited.

Renal Calculus, Pyelitis.

Our next patient gives us the following history: He is 42 years old. His parents are dead. One died of dropsy. He has never passed a stone. Five years ago he noticed a sudden attack of pain, which began over the right kidney. Since then he has had a good deal of pain over the kidney, and more or less pain running into the bladder and genital organs. He first noticed a change in the urine three or four days after the first attack. There were a few spots of blood, and there has been, occasionally, a little blood since.

Cases of this kind are so common that it will repay us to give a good deal of careful study to them. There are some very curious features about them, in their symptomatology, course, and the results of treatment, to which I shall call your attention.

The first question to decide is whether this man is suffering from a disease of the bladder or of the kidney. The man tells us that he has a good deal of pain around the kidney and down into the bladder, and that he finds a thick, white sediment in his urine, and sometimes a little blood. These are symptoms which are met with in disease of the bladder and in a certain kind of disease of the kidney. The disease of the kidney is not that which we call Bright's disease in any of its varieties, but it is a chronic inflammation of the pelvis of the kidney and upper portion of the ureter; in other words, pyelitis. It is the same sort of disease as cystitis, *i. e.*, an inflammation of a mucous membrane. We proceed, then, to ask ourselves: Where is the seat of this mucous inflammation? Is it in the bladder or is it higher up in the urinary passages? The elements upon which you will base your diagnosis are chiefly, (1) the seat and character of the pain; (2) the evidences of the presence or absence of irritability of the bladder ; and (3) the chemical and microscopical characteristics of the urine.

The Seat and Character of the Pain.—In cystitis there is a great deal of burning and tenderness about the vesical region, and from time to time, when the disease is aggravated, there is aching extending up toward the kidney. In pyelitis, on the other hand, the pain, with great constancy, is found in the renal region, and extends often along the course of the ureter into the bladder and groin, attended with drawing up of the testicle and pain in the end of the penis. The retraction of the testicle and pain in the penis are not so constant as the location of the pain in the renal region, and its tendency to extend along the ureter. In addition to this there is, in the intervals between the sharp attacks of pain, dull, deep-seated pain over the kidney and tenderness on pressure, so that if we direct the patient to lean forward and press over the kidney, we find, on one side or the other, decided soreness. Often you will find that any sudden jar to the patient's body will give him pain in the renal region. The amount of pain will be governed, in the first place, by the severity of the inflammation and by the irritability of the parts, and secondly, it is governed very much by the presence or absence of a calculus in the pelvis of the kidney. If there is but one smooth stone, imbedded firmly, there may be very little pain, but if the stone is jagged and free to move, the slightest jar will cause extreme pain.

You will gather from this that the seat and character of the pain, the presence of renal tenderness, and the comparatively slight amount of pain over the bladder, will cause you to think that it is the pelvis of the kidney that furnishes the pus, and not the lining membrane of the bladder.

In regard to the urine. I here show you a sample of it. It contains a thick, white sediment, which, on shaking, diffuses itself through the liquid. This shows that it is pus. Mucus, on agitation, forms little masses, which float around in the urine, but it does not break up and

diffuse itself, like pus. This urine is albuminous, loaded with pus, contains amorphous phosphates, some urates, but no tube casts. In cystitis the urine is apt to be fetid, and the deposit nearly always consists largely of stringy, ropy mucus, and on microscopic examination we find a great deal of mucus with a moderate amount of pus. In pyelitis there is little or no mucus but a great deal of pus.

The most frequent cause of pyelitis is the formation of a calculus. It may also be caused by repeated chillings of the surface and the establishment of catarrhal pyelitis. This latter cause is more apt to give rise to cystitis. If only one kidney is affected the cause is probably a local one.

While the symptoms to which I have referred are the common signs of calculous pyelitis, there are other symptoms which I have noticed in some cases, and which are very misleading. I remember a case which occurred several years ago. A man of gouty diathesis and intemperate habits was seized with a headache which continued without the slightest intermission until his death. Nothing relieved it. There were no symptoms of organic disease of the brain. There was no syphilitic nor malarial history. No toxic poisoning of any kind. He was tried with large doses of quinine, large doses of arsenic, with the iodides and the bromides, codeia, aconitia, gelsemium, counter-irritation of the most severe type, localized galvanism of the brain, change of scene, with every influence that could be brought to bear, but the pain continued without change until he at last sought relief in morphia. From the occurrence of the headache until his death he had not an instant's ease, except when under the influence of morphia. After death, the most minute examination of the brain was made, but there was nothing found but a little thickening of the dura mater. In the kidney there were found twelve or fifteen calculi imbedded in its surface. I never knew whether they had anything to do with the pain or not, but that was the only lesion found in this man's body, who had suffered from the most severe headache for four months. There was no pyelitis.

The other day I saw a case in which there was a floating kidney, containing a calculus. The woman had complained of vomiting, and not rarely vomiting streaked with blood, and progressive emaciation. Cancer of the stomach had been diagnosed. At the autopsy, the stomach was found to be normal, and the only lesion was the renal calculus in the displaced kidney.

Occasionally you will find a hectic irritation kept up in these cases. There may be remittent or intermittent febrile paroxysms, with night sweats, progressive anæmia and emaciation, simulating the condition which we find in deep-seated abscesses. This is caused partly by surface irritation, and partly by the presence of some septic material in the blood. You find in these cases a great dissimilarity, both in the general and in the local symptoms. Sometimes the local symptoms are very marked, at other times these are very much in abeyance, and the reflex symptoms are very prominent.

Given, then, a case of pyelitis, we desire to know whether or not there is a calculus. It is often difficult and sometimes impossible to determine this with any degree of certainty. I would say that we determine this, chiefly, by the amount and extent of tenderness, the amount of pain following agitation of the body, and the frequency with which the urine is blood-stained, or contains macerated blood corpuscles. When there is a calculus, a little blood is apt to be passed. It is macerated by remaining in the urine, and the microscope reveals the altered character of the blood corpuscles, showing that they have not come recently from the bladder. It is not discharged in clots, as in cystitis. It sometimes gives a light pinkish hue to the urine, but at other times it does not color it at all.

Our treatment is governed by these considerations: whether there is or is not a calculus, by the severity of the local inflammation, and by the character of the general symptoms. If there is clearly a calculus, and we have waited for some time, but there is no sign of its coming away, and the symptoms are very urgent, it is impossible to avoid considering the question of cutting down on the kidney and removing the calculus. These are the cases in which nephrotomy is earning a just position for itself among surgical procedures. A large number of cases have been operated on, with an encouraging proportion of successes.

Can we do anything to favor a solution of the calculus? I doubt if there is any form of mineral water, or any remedy, that can lessen the size of the stone. The only way in which this could be done would be indirectly, by favoring a healthier state of the mucous membrane of the pelvis.

Rest is, unquestionably, one of the most important elements in the treatment. This may, with advantage, be absolute, for a considerable period. There is no harm in keeping such a patient in bed for several months. Secondly, whether this is done, or not, a most rigid attention to hygiene and an avoidance of those little exposures which are apt to favor catarrhal attacks are necessary. In the next place, the diet requires close attention. It should be simple and unirritating. One which neither contains such substances as are irritating to the kidney, as alcohol, highly flavored dishes, articles containing spices, and the like, nor, on the other hand, articles which load the urine with a great deal of organic matter, as very rich, sweet and heavy dishes. It should be one which will promote the free secretion of urine.

Unquestionably, a milk diet is, on the whole, the best. It is desirable to place such patients upon a diet of milk, whey, a little farinaceous food, and a little animal food, as eggs, and tender, lean meat. Rest, rigid diet and hygiene put the patient in a very favorable condition for having this inflammation healed.

Besides this there are drugs which undoubtedly exert a beneficial influence upon this membrane. In the first place, those drugs which keep the urine neutral or slightly alkaline, and promote a free secretion of urine, are useful. For this purpose we may employ many of the saline mineral waters. As a type of this class I may mention Vichy water. This is an agreeable, powerfully alkaline, and very unirritating water.

Then there are waters which are alkaline and chalybeate. These are exceedingly valuable. If Vichy water is used, you may give iron associated with it; or you may give iron in combination with an alkali, as, for instance, a vegetable salt of iron, with potash; or Basham's mixture may be employed.

There are other drugs, the so-called alterative diuretics, which have a beneficial action upon the urinary organs; thus, uva ursi, buchu, copaiba and sandal wood, may be mentioned as examples of substances which, taken into the stomach and absorbed, are excreted by the kidney, and thus mix with the urine, forming a slightly stimulating solution, which bathes, day and night, the irritated surface. Thus, in a case where there is not much urgency, and where the simple hygienic tonic course does not relieve the discharge of pus, it is proper to associate one of these alterative diuretics, and they may modify favorably the inflammation of the mucous membrane.

Anything which modifies the character of the urine and allays the irritation, reduces the amount of pus and lessens the deposit of organic matters and urinary salts upon the calculus, and therefore, under the slow action of the urine, the stone may be gradually worn away until it is small enough to be discharged, so that, indirectly, this treatment may lessen the size of the calculi. I have seen this occur not rarely.

More commonly another result takes place. The irritation and the amount of pus may diminish, the calculus still remains, but adhesions have formed, and it becomes encapsuled. It may block up the openings of one or more tubes, leading to cystic degeneration of the kidney, or it may lie in such a position as to offer no impediment to the passage of the urine.

Lastly, the stone may remain almost indefinitely, and the patient enjoy fair general health, as long as he pursues a very careful hygienic course. A certain amount of pyelitis persists, the urine always contains a little pus, a slight cystic irritation remains, and the patient, on the least indiscretion, is warned of his danger by an attack of colic.

In this patient we have reason to suspect a calculus, but the symptoms are mild. I shall put him on the treatment which I have described, and shall continue it for several months.

Medical Societies.

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.

Do Mammary Adenomata Undergo Carcinomatous Degeneration?

BY HENRY BEATES, JR., M.D.

Mr. President and Members:—This type of neoplasm is still spoken of, by representative continental pathologists, in a manner which clouds the mind with erroneous conceptions, and it is with the intention, so far as my experience and observations enable, to clearly describe and consider the clinical and pathological phenomena of the tumor, that I present the subject for your consideration. The title is selected because it gives prominence to a vital point in the history of these growths, and also that an opportunity has recently been afforded me to conclusively determine the affirmative of the mooted question. The consideration of the many neoplasms classified as adenomata or prefixed with the name adeno —— ——, will here be omitted, as our works of reference sufficiently abound with the confusing literature of the subject. Billroth, Green, Cornil and Ranvier, Wagner, Paget and others, refer briefly to mammary adenoma, and while assigning to it identity, emphasize the fact (?) of its great rarity. The accumulated statistics of many surgeons, for years, afford us a history of but fourteen cases, and were these typical tumors, alone, admitted to have occurred, we would certainly have to deal with a most extremely rare growth. That the tumor is comparatively rare cannot be gainsaid, but that it is of far more frequent occurrence than statistics indicate is certainly a fact. Many mammary tumors, microscopically determined to have been adeno-myxoma, adeno-fibroma, adeno sarcoma, etc., etc., will, I think, by future experience and study, prove to be either adenomata, undergoing these secondary changes, or true primary myxomata, fibromata, etc., etc., developing, as this type of neoplasm does, from the connective tissue of the gland, and permeating the true adenoid structure and separating the acini in such a manner as to present appearances sufficiently misleading to occasion errors in diagnosis. Note here, that these compound neoplasms are composed, histologically, of true gland structure plus connective tissue new formation, and that there is a broad difference between these and carcinomata, which develop from epithelial structure alone.

In this connection it may be proper to refer to a form of tumor, or more correctly speaking, lumps, which occur in the breasts of ladies in active catamenial life, that in no sense constitute adenomata, although requiring close observation and care lest they might, by irritation or injury, eventually become morbid. Reference is made to those instances, certainly of frequent occurrence in the experience of every practitioner, of lumps that are located in segments of the mammary gland, which, upon examination, are found to be enlargements of one or more lobules, due to either stenosis of efferent ducts, congestive thickenings, etc., and which during menstruation become markedly increased in size, hyper-sensitive, and even painful. These enlargements are of irregular contour, capable of being freely grasped, and when lifted elevate the whole gland, demonstrating clearly that they are of the gland itself. Comparison with the unaffected side gives no evidence of hyperplasia. The difference of sensation imparted by these and true adenomata can only be interpreted by comparison, for it must not be forgotten that the true neoplasm is a new formation of the gland itself, and when grasped and lifted also elevates the whole breast. The evident attachment by a pedicle is a point for differentiation. That many of these lumps have existed and after the menopause disappeared is a truism needing no demonstration. That

many tumors presenting almost the same phenomena as the above have existed, and at the menopause not disappeared, is also true. That the former variety of lump has been recognized and known to disappear, and confounded with the true neoplasm, is a sufficient explanation of the indecision of the profession regarding the treatment. Many instances are called to the minds of all, of tumors, very vaguely called, and as indefinitely diagnosed, that have been removed, returned, or not, some successfully, others with fatal consequences, and we have formed conclusions pro and con, unconsciously regarding them as confirmations of opinions which, when analyzed, shine with inconsistency and ignorance.

What a degree of doubt burdens our minds when forming a diagnosis and recommending a plan of treatment! How we await the time when unequivocal manifestations of malignancy occur, to confirm a dread, or if perchance it may happen, disappear, and relieve us of further responsibility! What visions of cancer return, metastases, etc., cause us to hesitate, yet opposed with an indefinite recognition, that conservative treatment may find us off guard and surprised with malignancy, which, if it had been properly treated, would have saved our patients, harass our minds, and attest the ignorance of this subject! Because Mrs. A. had a breast tumor for 20 or 30 years, that disappeared at the menopause; Mrs. B. one of 10 years' duration, that was removed and has remained perfectly well for 20 years, shall we tell Mrs. C. that her's, so far as our senses enable us to determine, is identical, and that as Mrs. A.'s vanished and Mrs. B.'s did not return, and was, therefore, not cancerous, it would be folly for her to undergo the risks of a surgical operation? This might be done if we knew that adenomata did not become carcinomatous, and were certain of a correct diagnosis, for it must not be forgotten that the nature of the tumor present is very frequently not understood. A thorough knowledge of the histology, clinical history and pathology of adenoma will clear many doubts, enable an unbiased opinion to be formed, and a proper plan of treatment advised. As the affirmative of the question is herein maintained, and per consequence, the extirpation of the breast advised, attention is invited to the histology of typical adenoma, in order to secure just approval or condemnation. This rough diagram illustrates sufficiently clearly the structure of the normal gland.

Special points noticeable are, first, the small proportion that the connective tissue bear to the acini; second, the few fusiform cells in the wall of each acinus and interlying connective tissue; third, the almost uniform size of acini; fourth, the membrana propria, which is the true basement membrane, upon which are situated the epithelial cells, which constitute the fifth object of notice; these cells are somewhat columnar, bear a constant relationship of breadth to height, and possess nuclei; sixth, spaces between the acini, which seem to be separations of the interacinous connective tissue, that are lymph channels, and serve an important factor in carcinomatous changes, as the proliferated cells congregate here, and thence are conveyed through the vessels (lymph) to the contiguous glands. The epithelium constitutes the secretive element, and elaborates from the blood, the lacteal fluid. The gland is in full sympathy with the reproductive system, and during the catamenia becomes hyperæsthetic and even painful. This is due to hyperæmia, and is of interest, in so far as the general belief, that when more blood exists, then do we have excessive development, is concerned, and the possible etiological factors thus suggested.

This describes the appearances presented by the section under the microscope, of pure adenoma. The only difference consists in an increased proportion of connective tissue, and a greater number of fusiform cells. A greater tendency to formation of fibroid tissue is seen. The lumen of each acinus is seen to be occupied with epithelial cells, such as we presume to be the fact in a gland secreting milk. The only difference here, however, being the freedom from fatty elements. Notice especially that the membrana propria is intact, and that the lymph spaces are empty.

Comparison of this with the former demonstrates vast histological differences. The connective tissue is increased, the fusiform elements more numerous, and lymphoid cells infiltrate the whole structure. The lymph spaces and vessels are distended with large, multinucleated, irregularly shaped, epithelial cells. The membrana propria is destroyed, and can only be recognized in portions of some few acini.

In a normal lymphatic gland nothing is discernible but a field of lymphoid cells partitioned into small, circular areas by a delicate fibroid stroma. These glands, when the seat of carcinomatous changes, present a typical appearance of malignant cancer, which, as you know, consists of stroma made up of fibroid structure arranged in bands joining, at acute angles, with the spaces thus formed, filled with epithelial cells of irregular shape, multinucleated and aggregated. This is represented by the next diagram, and can be recognized by the slide under the microscope.

This gives a fair representation, and clearly demonstrates the vast change that occurs in malignant degeneration. The transformation is so complete that, were it not known to be a section of lymphatic gland, it would be impossible to state whence the specimen was derived. The section you are viewing is taken from an axillary lymphatic gland. The history of the case will be given later. The adenoma is shown to offset the general belief concerning the "extreme rarity" of their occurrence and that the changes above referred to may be seen and recognized by all.

The history of this case, diagram No. 2, is as follows: Mrs. B., aged 49, married, nulliparous, has always enjoyed excellent health until three years ago (four after the menopause), when she first discovered a lump occupying the outer and lower two-thirds of the right breast. This was not painful, and remained about the same size until ten months before relief was sought. At that time a pain, lancinating in character and aggravated nocturnally, developed and slowly became more severe and exhausting. The tumor increased rapidly in dimensions, and the

nipple discharged a lacteal fluid. Four months later the unaffected gland began to secrete a similar fluid, although nothing could be detected by touch. The intense pain prevented sleep and impaired appetite, and produced marked failure of flesh and strength. The patient was first seen at this period. I found the tumor hard, movable, exquisitely painful and faintly irregular in contour. The cutaneous surface was not altered in appearance, and not attached. Nipple retracted, exuding the above mentioned fluid in sufficient quantity to soil the garments. Axillary glands free.

Extirpation was advised, and four weeks later effected. I removed the whole gland and adjacent adipose tissue. Patient is now well, enjoys excellent health, and seven months since removal presents no manifestations of return. (Adenomata, when removed without including gland, are prone to return.)

The patient from whom diagrams 3 and 5 are sketched is under the care of Dr. Parrish, who presented the specimen to the Philadelphia Obstetrical Society with the following history. The tumor was referred to me for microscopical examination. Lady, Mrs. Blank, aged 69, mother of several children, first noticed a lump in her breast 31 years ago. It was small and very hard, slightly irregular in contour, free to be moved, and painless. For 30 years it occasioned no trouble, but during the 31st year became painful and began to enlarge. The axillary lymphatic gland also became enlarged and indurated, and subsequently proved troublesome, from nocturnal pain. The skin over the tumor became attached, but no other changes were noticed. Excision was effected, and the results you have before you. No hereditary tendency to carcinoma exists in her family.

Having seen these facts, and being able to verify them by personal observation, to what other conclusion can we arrive than that adenoma of the mammary gland does become carcinomatous? Can the objection be raised that this tumor was always carcinomatous? The whole clinical history of carcinoma, in all its forms, and under all circumstances, stands prominently in opposition, and does not, for one moment, permit of such a supposition. We are forced, then, to conclude that this instance, at least, conclusively demonstrates that it, originally a pure adenoma, has, after many years, become the seat of carcinomatous degeneration, and constituted the point from which the axillary glands, and probably whole system, became secondarily involved.

Mammary adenoma is peculiar in that it affects primarily but a segment of the gland. Its growth is, as a rule, slow, varying from one to thirty years. Exceptionally it may be fully developed in a few months. Its shape and contour closely resemble scirrhus and other forms of carcinoma, and from these conditions offers no means of differentiation. The pain and retraction of nipple occurs in this as in cancer. When adenoma occurs during the child-bearing period a marked molimenial exacerbation of subjective symptoms occurs, which affords a good diagnostic picture. The often detectable pedicle existing between the neoplasm and the gland proper affords additional evidence of its nature, as well as the secretion of lacteal fluid, even if in nullipara.

The involvement of skin, enlarged vessels and lymphatics, is not seen until carcinomatous change has occurred. Regarding treatment, but little can be said. The tendency to return of the pure neoplasm, which, in its non-cancerous state, occasions severe suffering and may prove fatal, demands removal, not of the tumor alone, but the whole breast. The fact that it may become cancerous more urgently demands a similar course, and that *early* in its existence.

Remarks.—Dr. L. Brewer Hall believes that carcinoma may afflict any portion of the system, and especially morbid and cicatricial tissues. It may follow a bruise, or even a scratch. Such being the case, it is not impossible for adenoma to become cancerous, yet is it so liable so to do as to warrant operation before manifestations of degeneration occur? If the growth remains stationary, I would be disposed not to interfere and await further developments. The clinical behavior should suggest the treatment, and the histology need not be so thoroughly known in forming plans of treatment. On the whole, I prefer the expectant plan of treatment, which does not incur immediate danger from the operation.

Dr. E. E. Montgomery agrees with the author, that adenoma of the mammary does become carcinomatous, and coincides with the view that extirpation of the mammary gland, in its entirety, should be effected. That the occurrence of a single instance like the case narrated this evening should be possible, is sufficient to determine the employment of radical measures in order to avoid similar catastrophes. Many ladies, when cognizant of a tumor, become morbid and live in constant dread of cancer. Their lives are thus blighted and their usefulness impaired.

The psychical influence must not be overlooked, and should be a factor of considerable attention. The relief of mind following removal of a tumor, and the happiness ensured, should be of sufficient import to alone demand operation.

In closing the discussion, Dr. Beates remarked that it was this spirit of conservatism recommended by Dr. Hall that he especially desired to meet. He does not believe it proper to delay and postpone the only chance of cure until carcinomatous changes have occurred and the patient is constitutionally involved and rendered incurable. The danger of the operation is nothing in comparison to the great and fatal consequences of cancer, and should not be given a thought. The complete understanding of the histology is an essential, and its absence may easily explain the apparent rarity of adenoma. Surely adenoma is not a neoplasm of recent years; it certainly affected the mammary gland as long as woman has existed. That it has not been recognized, and when seen, been associated with various degenerations, or again when marked by preponderating pathological elements and not perceived is attributable to the fact that the histology and morphology has been neglected and not understood. In his limited experience, no less than five instances of œdema, verified by microscopical study, have been met with. He believes that

many tumors of doubtful nature were primarily pure adenoma, which, if they had been removed, would have resulted in complete cure and salvation from malignancy. The proneness to epithelioma or carcinomatous degeneration of the cervix uteri, after the menopause, is a fact widely known. The intimate sympathy existing between the mammary gland and the reproductive system, of which, indeed, it may be considered a part, affords additional cause to infer that such catastrophe might rationally be expected in the neoplasm under consideration, especially as it is already the product of morbid processes. Had this plan of treatment been adopted early in the history of Case No. 3, she would not now be a victim of cancer. With these views he recommends the treatment above set forth.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Annual meeting, held at Dr. Chas. Turnbull's, 1702 Chestnut street, on Friday evening, May 26th, 1882.

Dr. J. Solis Cohen in the chair.

Dr. Brose, by invitation, exhibited a case of Ludwig's angina, of which he gave the following history:—

B. R., aged twenty-one years, single, habits temperate, no history of syphilis. Father died at the age of fifty-three years; cause unknown. Mother living, and in good health. Has brothers and sisters, and as far as he knows they are in perfect health. Three weeks ago he caught cold, and then complained of cough, difficulty in swallowing, but had no enlargement of the neck until a week later, when he noticed a swelling on the right side. This was soft, and was seated below the inferior maxilla, extending from the anterior margin of the sterno-mastoid muscle to the median line of the neck, embracing the thyroid gland. There was no tenderness on pressure, nor difficulty in breathing. He consulted a physician, who advised a flaxseed poultice, which being applied, the swelling and accompanying symptoms disappeared. The swelling remained away two days, when the door and windows of his room being left open at night, he again caught cold. The right side of the neck now became swollen and very hard. He was unable to swallow solids, and complained of dyspnœa. The swelling gradually became smaller but harder, until his admission into the wards of Dr. F. H. Gross, at the German Hospital, May 16th, 1882, when he presented the following symptoms: breathing unobstructed, swallows liquids with some difficulty, but is wholly unable to take solid food. The enlargement on the right side of the neck, a very hard and firm mass, extends from the inferior maxillary, embracing the submaxillary gland, downward, three inches; from the sterno-mastoid muscle behind to the median line of the neck in front, embracing the thyroid gland. There was no pain on pressure, and the local temperature was but little above that of the opposite side. His axillary temperature ranged between 98° and 100° F., being always from ½ to 1° higher in the morning than in the evening. On passing a bougie, an obstruction was encountered at the beginning of the œsophagus.

The treatment has consisted in mercurial inunctions, and the tumor has diminished much in size but retains its hardness.

At present the patient swallows solids without difficulty, and the remains of the swelling consist of a hard mass, situated in front of the sterno-mastoid muscle, at the level of the upper border of the larynx. The patient was discharged cured, June 12th.

Remarks were made upon the case by a number of the members, Dr. Cohen observing that the description seems more as though it was a diffuse inflammation of the connective tissue of the neck, or Ludwig's angina, as in disease of the thyroid body, acute thyroiditis, the tumor would extend below the level of the larynx.

Dr. J. Solis Cohen read a paper on "Rigidities of the Crico-arytenoid Articulation."

The following officers were elected for the ensuing year: President, Prof. Harrison Allen. Secretary, Dr. Geo. Y. McCracken. Executive Committee, Drs. J. Solis Cohen, Chas. Turnbull and Chas. E. Sajous.

On motion, a vote of thanks was tendered to the retiring President.

EDITORIAL DEPARTMENT.

PERISCOPE.

Chronic Cerebral Meningitis.

In the *British Medical Journal*, Dr. A. Hughes Bennett reports the following interesting case: The subject was aged 37, of no occupation. The father of the patient, who was otherwise a healthy man, was said to have had several attacks of temporary paralysis affecting the right leg and both arms. These seizures came on suddenly, and their effects lasted from a few days to several months. Otherwise, the family history was healthy. The patient himself appeared to have enjoyed perfectly robust general health all his life till the present illness. He was born in Australia, and remained there till a few years ago, engaged in active and healthy pursuits. Since his residence in England, he had passed his time in country and outdoor occupations, and had always been noted for his activity and strength, as well as for his intellectual acumen. At the age of fifteen, on awaking one morning, the patient discovered weakness in one of his arms; this soon passed away. Since then he had been liable to attacks of a similar nature. Being in his usual good health at night, next morning he would find one or more of his limbs on the left side weak. This paresis lasted from a few days to some weeks, and on one occasion as long as six

months. The paralysis was not complete; and, when it affected the leg, did not prevent the patient from walking, but only caused him to be lame, and drag the toes along the ground. When the arm was attacked, it was weak; and there was numbness, especially on the ulnar side. In the intervals between these seizures he was perfectly well, and there was no trace of impaired motion. Even when the paresis was present, he could, as a rule, take a great amount of exercise; but on several occasions, when it was severe, he was completely laid up. He had never had syphilis, or any other cerebral symptoms, and was not aware of having had "fits" or attacks of any kind.

About the middle of September, 1880, the patient, being in his usual good health, was seized with a severe pain in the epigastric region, and with an illness which laid him up in bed for six weeks. It appeared to be confined to a spot about the ensiform cartilage, was increased on pressure and after food, and was modified by position. There was a little vomiting; but no blood was ever seen in the ejected matter. The medical men in attendance believed the affection to be ulcer of the stomach. At the end of six weeks the symptoms passed away; the patient became convalescent; traveled to London; and for the next three weeks, although generally weak, considered he was rapidly improving in every way.

On November 21st the patient was seized with a severe pain in the epigastrium, which again compelled him to apply for medical assistance.

Present Condition.—The patient was very tall, (said to be 6 feet 5 inches in height), of spare yet robust build, pale and somewhat thin, from his recent illness. He complained of a severe, dull, aching pain at the ensiform cartilage. This was not influenced by pressure, but was increased after food, although not to a great extent. There was nothing to be seen or felt locally. There was no vomiting, nor other symptoms. All the organs were healthy; but the patient was slightly feverish, greatly depressed in spirits, and had a look of much anxiety and suffering. This condition continued without change during the next five days, the pain occurring in paroxysms of an extremely severe character, leaving during the intervals a dull, aching sensation. On November 25th the urine was found to be loaded with bile; and on the following day the patient presented all the usual appearances of jaundice. For the following three weeks the condition remained much the same; and there was almost constant pain in the epigastrium, increased frequently by paroxysms of a very acute character. There were also griping pains in the abdomen, especially before and after a stool. The bowels were constipated, and there was well-marked jaundice; no vomiting or headache; no œdema or anasarca; and the appetite was fairly good. The most carefnl and repeated physical examinations failed to detect anything abnormal. About December 19th all the symptoms gradually began to diminish in severity; abundant bile appeared in the stools; the urine became clear; the yellow color of the skin perceptibly faded; and the epigastric pain was much relieved. The general improvement so advanced, that in a few days the patient became quite convalescent, was able to sit up. and, with the exception of great weakness and emaciation, felt in good health and spirits. This continued until January 1st, when he was suddenly seized with an acute, lancinating pain in his head, accompanied with feverishness and great depression, which lasted during the day, and which was finally relieved by a hypodermic injection of morphia. A few days subsequent to this, a return of his former complaint was observed; namely, paresis of the left leg. The extensors of the foot were paralyzed; and, when the patient walked, he was very lame, and the toes dragged along the ground. The extensors of the thigh were also weak. All the flexor muscles seemed to be normal. The extension of the left hand was somewhat impaired, but otherwise the limb was unaffected. There was no loss of sensibility. With this exception, the general convalescence progressed favorably till January 6th, when the patient stated that he had a "fit." He said he had a repetition of this seizure on the following day. During the succeeding twenty-four hours he had two more attacks, one of which was witnessed by Mr. W. L. Purves (who watched the case with me throughout), and who described it as a genuine epileptiform fit. There were sudden convulsions of all the limbs and face, and complete loss of consciousness, lasting for some minutes. Immediately afterwards the patient was weak and depressed, otherwise well. Next day there was distinct paresis of the right arm, and the face was drawn slightly to the left; no other cerebral symptoms. The paresis of the arm gradually increased till January 12th, when its movements were very feeble and imperfect, and the grasp of the hand was almost lost. The patient then was depressed and emotional, but his intelligence was perfect. There were now slight thickness of speech and hesitation in articulating. On the following day the right arm was absolutely paralyzed as to motion, but the sensibility was unaffected. Two days later the right leg was found weak; there was considerable difficulty in articulation, and the patient spoke in a mumbling way. The movements of the tongue were sluggish; and, when protruded, it was pushed toward the left side. The face was distinctly drawn toward the left. In addition to the difficulty of articulation, there was evidence of partial true aphasia, as the patient had difficulty in selecting and recollecting suitable words with which to express himself; but he never employed wrong ones. His understanding seemed intact. Till January 17th, all these symptoms rapidly increased, when, in addition, he was attacked with severe pain in the back, with cramps and contractions of the legs. The patient was dull and apathetic, but appeared to understand what went on around him. His speech was now unintelligible. All the symptoms increased, and on January 22d the whole of the right side was completely paralyzed. Although the patient could not say a word, he appeared intelligent, and understood what was said to him. On the 28th the patient was evidently becoming weaker, the sphincters began to be relaxed, and the catheter had to be used.

From this date to February 8th he gradually sank, became comatose, and died.

A post-mortem examination was made, from which it was concluded that the patient, in early life, without apparent cause, was afflicted with chronic cerebral meningitis, which, for many years, caused no symptoms except occasional attacks of temporary hemiplegia. The changes in the tissues and circulation thus induced may have afterwards been the starting-point of the chronic abscess, which existed for a long time, without producing any symptoms. Five months before death the patient was seized with an acute attack of limited peritonitis, involving the portal system, and subsequently causing thrombosis and obstruction of these veins. The constitutional disturbances induced by the second attack of this illness probably excited the recent acute action in the brain, in the shape of cerebro-spinal meningitis, and the extension of the already existing abscess.

Successful Gastrostomy.

In the *Lancet*, Mr. Thomas Bryant records a successful case of gastrostomy, for cancer of the œsophagus. The patient, a male, aged sixty-five, had enjoyed good health up to the winter of 1879 80, when he occasionally suffered from fainting fits, and was greatly troubled with dyspepsia. He grew gradually worse, and finally exploration revealed a stricture at the lower end of the œsophagus. Gastrostomy was determined upon, and the following operation was performed on Dec. 3d, 1881: The bichloride of methylene was used as an anæsthetic, and the carbolic spray was employed. An incision three inches long was made about half an inch below the margin of the left ribs and parallel with them; the skin and muscles were consecutively divided down to the peritoneum; all bleeding vessels were twisted as they were divided, and all capillary oozing was arrested by a wet sponge. The peritoneum was then divided, and the stomach, which presented itself, was at once seized, care being taken at this time to keep the wound well sponged, to prevent anything passing into the peritoneal cavity. The stomach was brought well forward through the wound, by means of two loops of fine carbolized silk, which were inserted through the peritoneal covering of the stomach, about one-third of an inch apart. The ends of these loops were left long, for a purpose to be described later on. The stomach was next carefully fastened, by a series of interrupted silk sutures, to the margins of the wound, the sutures including the parietal peritoneum with the muscles on the one hand and the peritoneal coat of the stomach on the other. The stomach at this stage of the operation was not opened. The wound was dressed with a mixture of one part of terebene and three of olive oil, a half grain morphia suppository was given, and small nutrient enemata of four ounces of milk and beef tea, with ten drops of laudanum, were ordered to be given every four hours. The patient progressed well, and on the eighth day after the primary operation the stomach was opened by making a puncture through its coats with a tenotomy knife, one-eighth of an inch wide, having gently elevated the exposed surface of the viscus by means of the loops of silk left long for this purpose. All the sutures were removed. A tube the size of a No. 9 catheter was then introduced through the artificial opening into the stomach, and the patient fed with a few ounces of warm milk, none of which escaped on the removal of the tube. He was now fed partly by enema and partly by the introduction of food into the stomach through the artificial opening, the use of the latter being gradually increased day by day. The stomach bore the food well. The routine of feeding by the stomach, three weeks after the last operation, is reported as follows: 9 A. M., milk, one egg and two drachms of brandy; 3 P. M., beef tea, with finely minced pancreas; 9 P. M., milk, egg and brandy; 3 A. M., milk, egg and brandy. On the thirty-sixth day it is noted that he is gaining strength and is able to sit up daily.

January 25th. Mr. H. is now able to come down stairs, but the effort of walking up again causes great fatigue and slight swelling of the legs. The wound is nearly healed and looks dry. The orifice of the artificial opening into the stomach appears as a dimple. There is no difficulty in introducing the tube for feeding purposes. He takes four meals daily very well. Bowels act well. Urine healthy. Bad temper is his only drawback.

March 20th. Three months and a half after the operation, Mr. Stephens reports: "After the operation Mr. H. steadily gained weight until about Feb. 18th, since which time he has been, I fear, going down hill. There is now scarcely a trace of the wound, only the artificial orifice. He is fed regularly every six hours by the tube in his stomach, but takes some new milk daily by the mouth, and milk with coffee or tea occasionally. He is now steadily, but none the less surely, losing ground, and is unable to take as much food as formerly by the stomach."

To-day (April 2d) he reports: "Mr. H. is still getting weaker, though very gradually. Finds more difficulty in taking liquid by the mouth, and experiences pain in the right shoulder-joint at each gulp. The stomach retains food well. Bowels more regular, and motions healthier than they have been for many months. The nutrient suppositories are still of immense value. He remains down stairs daily for eight or nine hours, and gets about in a Bath chair." May 2d: At the present time he is as last reported.

In conclusion, Mr. Bryant says: "Let me summarize what I wrote a year ago when relating a case of gastrostomy for cicatricial stricture, at a sister Society (*vide The Lancet*, April 9th, 1881). That gastrostomy for cancerous stricture of the œsophagus should be undertaken as soon as there is a practical difficulty experienced in the deglutition of solid food, life being prolonged by such a practice, since the progress of the cancerous disease is retarded and much misery is saved. That the operation should always be divided into two steps, as suggested by Mr. Howse, and that the second step should be performed on the fifth, sixth or seventh day after the first, according to the repair in the seat of operation and urgency of the case. That the opening into the

stomach should not be larger than that made by an ordinary tenotomy knife, or about one-eighth of an inch, since such an opening is elastic enough, on the one hand, to admit a tube for feeding purposes, through which thick food can be injected with the feeding apparatus I employ, and on the other to close after the removal of the feeding tube, so as to prevent regurgitation of the stomach's contents, with its attendant evils."

Hypodermic Use of Amyl Nitrite.

Dr. J. J. Frederic Barnes thus writes, in the *British Medical Journal*:—

I have administered amyl nitrite hypodermically thirty or more times during the past eighteen months. In all cases a ten per cent. solution in rectified spirit was used. In no case did any untoward inflammatory or suppurative symptoms occur afterward. The action of the drug was immediate in every case, the subjective phenomena being like those experienced when using the ordinary methods of administration. The spirit solution appears to be an excellent preparation for use, as a small quantity kept in an ordinary stoppered bottle for some months retains its full efficiency at the present time. The dose usually administered has been ten minims of the solution, equal to one minim of amyl nitrite. In lumbago, where the patient is seen at the commencement of the attack, and the disease is not of long standing, the drug given in this manner instantly relieves the symptoms; a patient who is unable, previously to its administration, to bend the trunk without the most exquisite pain, five minutes afterwards can do so quite readily. In a case of paraffin poisoning, where the patient was in a state of collapse and almost pulseless, one administration (inhalation having been ineffectually tried) brought on an immediate resumption of cardiac function, the man speedily recovering. Its action in this case would, I apprehend, be due to the relief momentarily given to the congested centres by the peripheral hyperæmia induced. In another case, one of duodenal colic, the patient was found rolling on the floor, from the acuteness of the pain; when, on injecting fifteen minims of the spirit solution, the pain disappeared as if by magic, and the patient was at once able to resume his ordinary position. The value of this drug by ordinary methods of administration has already abundantly demonstrated how great a boon the discovery of Dr. Lauder Brunton is in the hands of the profession, notably in cardiac angina; and I feel confident that its utility may be still further enhanced by giving it, as here recommended, hypodermically.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Another edition of "The Vest Pocket Anatomist," by Dr. C. Henri Leonard, indicates that the popularity of this little manual is unabated. It is published by the author, Detroit, Mich.; price 75 cents.

——Dr. John C. Morgan, a respected homœopathic physician of this city, has written a little work on the "Diet of Infants and Young Children." It is a ground on which all "schools" can meet. His opinions are generally sound, except that he gives too indiscriminate praise to the various "prepared foods," and in some of his recommendations, as giving new cider to young children, he is too liberal. (James Hogan, Phila; price 25 cents).

——Dr. Radcliffe, of Washington, in a paper on the treatment of uterine fibroids with iodine, gives an ample bibliography, and states his own results as follows: "I have learned this much from treating quite a number of cases—cases probably in the incipient stage, and due probably to simple hyperplasia or proliferation of tissue—that by iodine the hemorrhagic status is changed, the menstrual periods prolonged or made regular, their approach and attack shortened, and the interval made more comfortable."

——"Iodoform gegen Diabetes Mellitus," is the title of an important contribution to therapeutics, by Prof. J. Moleschott, of Rome. He details five cases in which iodoform very positively benefited in this serious disease To prevent the unpleasant eructations he combined it with cumarin. His usual formula was—

R.	Iodoformi,	1.0
	Ext. lactuc. sat.,	1.0
	Cumarini,	0.1.

For twenty pills; powder with gum arabic and take from one pill twice daily to two pills four times daily, gradually increasing. Cumarin, it will be remembered, is the odoriferous principle of the tonka bean.

——The Alumni Association of the Albany Medical College has published the Proceedings of their Ninth Annual Meeting. President Vanderveer delivered the address, and made an earnest plea for the *moral* improvement of the profession. He most justly says:—

"Medical colleges cannot do all that is needed at the present time to improve the condition and standing of what we so love to mention as one of the three learned professions. They are making some effort in various directions, but the facilities and inducements in some portions of the country to organize new schools are such as to cripple seriously the good that is being done. I am sure that all the quackery exercised in the present day does not do as much harm to the practice of medicine as do the self-advertising, immoral and unworthy men in our ranks."

A number of prizes are offered for competition, to the alumni of the college.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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SURGICAL PROVISIONS ON RAILROADS.

We had just sent to press the remarks we lately made on the propriety of railroad companies providing the most immediate necessities in case of accidents, when we received a printed circular from the Denver and Rio Grande railway company, describing its "Train Medicine Chest."

This chest, with the printed instructions, is supplied to every passenger train. Its contents are as follows: Laudanum, ammonia mixture, styptic collodion, bicarbonate of soda, styptic cotton, surgical needles, silk, wax, sponges, adhesive plaster, bandages, lint, scissors.

The printed circular contains directions for the use of these in case of accidents, and also for the immediate treatment of emergencies such as are likely to occur. These include bleeding wounds, fractures, dislocations, burns and scalds, frostbite, rupture, fainting, shock, etc. The advice is presented in plain terms, with the utmost brevity consistent with clearness.

This line has also organized a regular staff of surgeons whose duty it is to respond at once to every call upon them from the employees of the road. The circular says:—

"Whenever an accident occurs on the line, the conductor must immediately telegraph the surgeon in whose charge the injured person is to be placed, in order that time may be given to prepare for reception of the patient.

"In case of injury inflicted by trains upon intoxicated persons on the track, tramps stealing a ride, etc., where the employees of the road are in no way to blame, the injured person must, of course, be carried to a station where humane and proper treatment can be bestowed; but, as such persons are generally without means, it is not advisable to take them out of the county in which the accident occurs, for, if removed beyond the county limits, the company may be held responsible for treatment and support."

We believe the preparation and distribution of this circular, and the organization of the staff, are due to the skill and energy of F. J. Bancroft, senior surgeon of the road, who deserves much credit for the measure.

It is one which ought to be extensively adopted throughout our country. The traveling public should be protected in regard to their health and safety in every possible way. This is little enough to ask of these corporations, which in turn are always asking so much of the public.

PRESCRIBING BY DRUGGISTS.

This much mooted question is still an open and undetermined one. But recently a death occurred in England from a supposed blundering prescription of a druggist, which gives fresh interest to the subject, and causes us to think a few words not out of place. In this case the coroner held that the responsibility of the druggist did not cease when he had wisely prescribed a drug that would not kill, but that the question then arose whether one more competent, whether a skillful physician, might not have ordered such medicine as would have effected a cure. There are two sides to every question, and it is but just that they should both be stated. It is a very prevalent notion among the public, not confined to the ignorant, but participated in, to a great extent, by the intelligent classes, that a druggist has a medical education. It is a very common thing

to hear him addressed as Doctor. Because he deals in and dispenses drugs, the public, without stopping to consider, hastily conclude that he is acquainted with all their properties and uses, and to a certain extent this idea is correct. But they fail to realize, because they have never been told, that the successful practitioner of medicine must know more than this. The art of diagnosis they know not of, neither does the druggist, and here comes in the fatal danger of "prescribing by druggists." One could hardly expect the ordinary druggist, when a man enters his store and asks for something for a sick stomach, or a sick headache, or a toothache, earache or constipation, to refuse to prescribe, since he would lose a sale of his wares by so doing. And in these trivial cases, likely enough, any intelligent druggist is fully capable of prescribing correctly. But where will the dividing line be drawn. We all know that some of the most serious and fatal diseases at times present but insignificant outward or ordinarily appreciable symptoms. In this fact we find the argument against "prescribing by druggists." We must ever bear in mind the fact noticed by the English coroner, that through ignorance of the true nature of the malady afflicting the individual, death may be allowed to ensue, on account of the inappropriateness of the remedy prescribed. Even conscientious druggists fail to realize this aspect of the question. Again, there is another danger. We are all human and are all liable to err. Supposing a man enters a drug store, and complaining of diarrhœa, asks for a remedy. It may happen that the druggist is very busy, or his mind may be pre-occupied in some other way, and he may therefore thoughtlessly prepare a mixture containing fatal doses of opium. Doctors are liable to make the same error, it is true, but the prescription passing through the hands of the druggist, the overdose is likely to be detected; it is hardly possible that *two* men will allow the error to pass unnoticed. Still, again, it is impossible to say that *intelligent* and *capable* druggists may prescribe in trivial cases, for who is to decide of the capability and intelligence of the man. This freedom of prescribing by druggists, which is, at least tacitly, recognized in our country, opens the door to untold evils. The majority of druggists are men of very little education outside of their regular business, and when they undertake so important a duty as prescribing for the sick, they are all the time in danger of some fatal error. It has been said that "*any fool can find fault, but that it takes a wise man to find a remedy.*" We confess that it is somewhat difficult to find a remedy for this evil. We can see such only in legislation. In theory it is believed and universally admitted that it is the duty of the physician to ascertain the nature of the malady from which his patient is suffering, and to prescribe the remedy, and that it is the duty of the druggist to compound such prescription. This is the theory, and it is plain enough; if carried out in practice all would be well. If now it were made a punishable offence for any druggist to prescribe, the end desired might be accomplished.

FREE DISPENSARIES AND YOUNG PHYSICIANS.

Charity covereth a multitude of sins, we are told, and it is truly a virtue that deserves great encouragement. But we can go too far in any good work, and it has now become a question for the attentive consideration of philanthropists, whether we have not in our large centres of population ample accommodation for the charitable and gratuitous medical treatment of our indigent citizens. It is a fact, and it is a shame, that many well to do persons, for one reason or another, and usually because of a miserly disposition, will resort to hospitals and dispensaries for free treatment, when they are amply able to liberally reward a physician for his services. We know of one case, where a woman afflicted with an ovarian tumor desired to be operated upon by a certain surgeon. He advised her to take a room in the hospital with the surgical staff of which he was connected. This lady's husband was sufficiently wealthy to enable him, before the operation, to give $15,000 in charity, and to pay some twenty or twenty-five

dollars a week board for his wife. The operation was performed, and the surgeon was compelled, in person, to dress the wound twice daily. He sent in a bill for five hundred dollars, which was refused him, on the technical ground that because he was a member of the staff (from which he received no remuneration), he had no right to charge any inmate of the house, even though, as in this case, the person in question was a *private* patient, sent to the hospital for good nursing. The authorities of the hospital supported the patient, and dismissed the surgeon from the staff. We are glad, however, to say that the courts of law took a more just view of the case, and gave the Doctor a verdict for his bill. It is only natural for persons to prefer going to a first-class hospital where they can receive *for nothing* the opinion and advice of the very leaders of the profession, rather than to seek some young, well informed, but obscure physician, and *pay* him for his services. In some places the old and great men of the profession are very high priced. None but the very wealthy can afford to enjoy their services for more than a mere consultation; while in other localities we find the leaders doing professional work as cheaply as the most recent graduate.

It is these two points that make the pathway of the young physician so hard and rugged. We would say to any young doctor casting about him where to locate, look for a place where free hospitals and dispensaries are very scarce; then inquire about the prices charged by the leaders; if they are very high you can settle down with a fair prospect of success, providing you take with you the two personal elements necessary to success in our profession, viz.: a good moral character and a thorough medical education.

Notes and Comments.

Strangulated Inguinal Hernia.

In the *Med. Press*, Mr. Norton relates the following case of a man, an old soldier, aged 59, who had had an inguinal hernia on the right side for thirty years. The rupture had given him much trouble at times, but the patient had always succeeded in reducing it himself.

On the 21st of December, 1881, the rupture came down while the patient was laughing, and he found himself unable to return it, after using a good deal of force.

On admission to the hospital the patient had much pain about the abdomen and was vomiting stercoraceous matter. The tumor was about the size of an orange and very tense. The man was put under ether, and the rupture not yielding to gentle taxis, an operation was performed in the usual manner. On the sac being opened, the cyst was found of a dark purple color, with abrasion of the peritoneal surface. After the constriction had been divided and the gut was being gently returned, it suddenly burst at the seat of abrasion, the contents of the intestine flowing over the wound. After the constriction had been more freely divided, the edges of the gut were stitched to the skin by silver wire. The patient vomited much during the operation, and immediately afterwards. On being put to bed a poultice was applied over the wound, and one-quarter grain opium given every hour, with teaspoonfuls of brandy and milk and soda water.

On the 22d patient was very prostrated, having vomited severely during the night, and complained of a good deal of abdominal pain. Pulse at 11 A. M. 135, and very weak.

On the 23d the vomiting continued at intervals, but not so severely, pulse being 120, stronger, and the abdominal pain much less, very little fecal matter at present coming from the wound.

On the 24th the vomiting still continued somewhat, but the abdominal tenderness had gone, and patient was able to take iced milk, and soda water and beef jelly fairly well.

On the 30th the man was quite free from all symptoms of vomiting, the wound was looking healthy, and a large quantity of liquid matter coming away.

On the 2d January, 1882, a soft pad, kept in place by an india-rubber bandage, was applied over the wound to prevent the discharge from constantly trickling over him and causing skin irritation. At this time the patient was eating and sleeping well.

On the 19th January, the intestinal flow having stopped for twelve hours, the patient was seized with severe vomiting, and brought up about a pint of stercoraceous matter; an india rubber tube was then with difficulty inserted, and a large quantity of liquid matter drawn off; this gave him instant relief. From this time a tube was passed twice daily and left in two or three hours, its passage being attended with some diffi-

culty, owing to the gut shifting its position. The patient went on in this way till the 18th of February, now and then sitting up in a chair with his pad on.

On February 19th vomiting began again severely, nothing flowing through the tube for some hours. After the bowel had been well relieved by the tube, the vomiting still continued incessantly, and the patient died of exhaustion on the 21st of February, two months after the operation.

Post-mortem.—On removing intestines the obstruction was found about a yard and a half from the ileo-cæcal valve; above this the gut, when distended with water, was two inches in diameter; below the stricture the diameter was about half an inch. About six inches above the valve was another doubling of intestine, which was fixed by adhesions. Water passed freely through this part, although the bowel was dilated above it. The duodenum and jejunum were otherwise normal. The cæcum contained several hard scybala.

Differential Staining of Nucleated Blood Corpuscles.

In the *Microscope*, Dr. Allen Y. Moore says that it has been urged against the differential staining of histological structures, that the process may induce an alteration which may be mistaken for the normal condition. That this is, in many cases, true, is beyond question, but the exceptions are far too numerous to justify it as a rule.

For some years past he has used a process for the double staining of nucleated blood corpuscles, which causes no alteration, except of course in color, and as the structure can be seen much better in a semi-transparent than in a more perfectly transparent body, the corpuscles thus stained offer advantages for study which are not found in those left unstained.

The fluids used for this purpose are two, which he designates as A and B. Their formulas are as follows:—

A.

℞.	Eosin	gr. v
	Distilled water,	ʒ iv
	Alcohol,	ʒ iv.

Sig.—Dissolve the eosin in the water and add the alcohol.

B.

℞.	Methyl analin green,	gr. v
	Distilled water,	℥ j.

The blood should be spread upon the slide, by placing a drop upon one end and quickly drawing the smooth edge of another slide over it. This, if well done, will leave a single layer of corpuscles evenly spread over the central part of the slide.

When the corpuscles on the slide are thoroughly dry, which will only require a few minutes, the slide should be "flooded" with stain A.

This should be allowed to remain on for about three minutes, at the end of which time it may be washed by gently waving back and forth in a glass of clean water. Before it is allowed to dry, the corpuscles should be again flooded, this time with stain B. After two minutes' exposure to this fluid the slide should be washed, as before, and set away to dry. When dry, a drop of Canada balsam may be put upon the blood, a cover-glass applied, and the whole gently warmed until the balsam spreads out properly. When hard, it may be finished the same as is usual with balsam mounts.

If now examined with the microscope, the corpuscles will be found to be well stained with red, while the nuclei and "leucocytes" will be a blueish-green.

The granular appearance which is ordinarily seen in the nuclei now shows with a vigor and sharpness which is difficult of description, while the whole corpuscle is as brilliant as a newly-cut ruby.

Boracic Acid for Granular Lids.

Dr. James L. Minor says (*Va. Med. Monthly*) that he has found boracic acid powder a most excellent application to granular lids. It is used as follows: The lids being thoroughly everted, the powder is spread freely over the whole conjunctival surface with a camel's hair brush. The acid is generously applied, and mixing with the discharge from the lids, it readily gains access to the cracks and crevices between the granulations, and thus comes into direct contact with the entire surface upon which it is intended to act. The immediate effect is to increase lachrymation and to cause a burning, gritty, sensation, with some pain. These symptoms usually pass off within ten minutes, and are followed by an amelioration of all the symptoms which existed before the application of the acid. The granulations may look less gorged and prominent, but he has not been able to discover much change in the naked eye appearance of the conjunctiva after one application. The powder was used three times a week. The improvement is so gradual that it is almost imperceptible as it progresses, but Dr. Minor has derived more satisfactory results from the use of this powder than from the ordinary caustic or astringent applications.

Fracture of Thyroid Cartilage

Mr. Reginald Harrison reports the following case in the *Lancet*:—

J. W. B——, aged sixty-three. a dock laborer, was admitted on March 28th, 1882. A few hours previously he had been kicked on the throat, upon which swelling and difficulty in breathing rapidly supervened. On examination, there was considerable swelling over the front and sides of the larynx. As the difficulty in breathing was rapidly increasing, Mr. Harrison advised that tracheotomy should be performed without delay, it being probable that the symptoms were due to a fracture of the thyroid. Mr. Harrison's house-surgeon, Mr. Rayner, accordingly, at once opened the trachea and put in a tube, at the same time verifying the diagnosis that had been arrived at. The patient, after the operation, was kept in an atmosphere well charged with steam, and for four days was fed by the rectum, after which he was able to take liquid food by the mouth. The tube was removed on April 8th. The wound rapidly closed, and the patient left the Infirmary on April 25th, some slight huskiness in the voice alone remaining. Mr. Harrison commented upon the extreme rarity of such injuries. Tracheotomy had undoubtedly saved the patient's life. The age of the patient had probably induced changes in the cartilage, which had somewhat added to its liability to fracture on the application to it of force, such as a kick.

Uræmic Convulsions and Coma Treated with Chloroform and Salicylate of Soda.

Dr. Thomas A. J. Cocksedge reports the following case in the *Lancet*:—

On the 28th of April I received an urgent message to attend the Rev. C. M. He had been under my charge for some weeks, as he was suffering from chronic desquamative nephritis, complicated with asthma. His kidney disease is, I believe, of nine years' standing. I found him semi-comatose, and during the day he gradually lapsed into a condition of profound coma. Convulsions came on about 1 P.M.; they occurred at first at intervals of about one hour, and as the day wore on, although less violent, with intervals of about twenty minutes. His last convulsion took place about midnight. He was seen by Mr. Martin Coates, of Salisbury, with me, about 11 P.M. He was then perfectly comatose, the pupils being quite insensitive to light. Mr. Coates considered him to be in a desperate condition, and I confess that I quite agreed with the prognosis. However, on visiting him again, after Mr. Coates left, I found the convulsions so much less violent that I became more hopeful. The next day there had been no recurrence of the spasms, and he steadily progressed toward recovery. The treatment of the case was as follows: Mustard and water were applied to the feet. Turpentine enemata were injected into the rectum. Podophyllin and jalapine were given by the mouth, being introduced through a quill. The surface of the body was sponged over with vinegar and water, and profuse diaphoresis was thus induced. Chloroform was administered by inhalation, during two of the severest spasms. On the second occasion, however, I noticed that respiration was with such difficulty reëstablished, that I did not venture on a third administration of this remedy. Before leaving, on the morning of the 29th, I gave him an enema, almost as hot as I could bear my finger in, of very weak mutton broth, this being the first food which he had taken since his evening meal of the 27th. On the 29th, as soon as he was able to swallow, I gave him seven and a half grain doses of salicylate of soda, in weak milk and water, every six hours.

Painful Affection of the Wrist.

In the July number of the New York *Medical Journal and Obstetrical Review*, Dr. Edward H. Bradford, Surgeon to Out Patients, Boston City Hospital, relates three cases of a painful affection of the wrist, the features of which were: pain referred to or most severe at the middle of the carpus; slight swelling; an absence of constitutional disturbance, and with no interference, or but partial interference, with motion of the articulation between the carpus and the radius and ulna. The symptoms were relieved by fixation, and recovery took place, finally, after a period of rest. The author considers them examples of synovitis of the carpus.

The Ergotine Treatment of Uterine Tumors.

In the July number of the New York *Medical Journal and Obstetrical Review*, Dr. Wm. T. Lusk, Professor of Obstetrics in Bellevue Hospital Medical College, relates a case of fibromyoma of the uterus, in which ergotine injections into the subcutaneous tissue of the abdominal wall over the tumor, not into the tumor, resulted in a rapid diminution in the bulk of the growth, at the expense, however, of gangrene of the compressed tumor, ending in fatal septicæmia. While some few cases of recovery by use of these injections are on record, they cannot be said to have gained the confidence of gynecologists.

Morphia Hypodermically as an Adjuvant to Chloroform.

Dr. Andrew S. Currie, in the *Lancet*, calls attention to a paper on this subject in the *Practitioner*, by Dr. Alexander Crombie, which he considers has not received enough attention. Dr. Crombie states that in 600 cases, in only one was there any evidence of asphyxia, and in that instance the usual precautions had been neglected. The method employed is very simple, and consists in the hypodermic injection of morphia immediately after beginning the administration of chloroform. I have recently employed a modification of this plan with the greatest comfort to the patient and to myself. About ten minutes before administering the chloroform I inject a full dose of the liq. morphiæ hypod. (B. P.). The chloroform is freely sprinkled on a piece of lint folded twice, and one dose is, as a rule, sufficient to induce complete anæsthesia.

Dr. Currie says that having, a day or two ago, to open a large abscess of the thigh, in the case of a lady who has been an invalid for the last ten or twelve months, I induced anæsthesia easily and rapidly in this way. The patient, who has repeatedly had chloroform administered for confinement, tooth extraction, etc., assured me that she had never before taken it with such a total absence of all feeling of discomfort. There was no sensation of suffocation and no trouble with after-sickness, which had on previous occasions proved troublesome.

Codeia in Diabetes.

In the *British Medical Journal*, Dr. R. Shingleton Smith relates some cases of diabetes treated by codeia, in which this drug produced very good effects. It has a remarkable power of checking the elimination of sugar, and a corresponding improvement in the health of the patient results. It would appear that alkalies and all other methods of treatment are far inferior to the treatment by codeia, which may be considered to have almost a specific action on the disease. The facts seem to justify decided language with regard to the use of codeia, which should not be permissive, but imperative, in all cases of advanced diabetes mellitus; whatever else may be given, codeia should first be given, and in fairly large doses, until some physiological effect is produced. Even dieting appears to sink into insignificance, alongside of codeia, and in one case this drug alone was sufficient without any dieting, the patient being on a mixed diet all the time. In all the cases reported there was marked improvement while taking the codeia, which ceased when it was withheld, and was renewed on its repetition. Morphia had a good effect in two cases, but the improvement with it was much less marked than with the other alkaloid.

Treatment of Scars of the Face.

A most important branch of cosmetic surgery is treated by Dr. C. L. Bull, of New York, in a reprint from the *Transactions* of the Ophthalmological Society. He says: "Persistent rubbing and kneading of scars of the face, both those due to burns and those resulting from bone caries, as preparatory to blepharoplasty, have, in a number of instances in the writer's experience, yielded most excellent results. Adhesions of scars, slight or extensive, to the subjacent parts, have been slowly, cautiously and painlessly detached, and a gradual absorption of the firm material in the dense part of the scar has been brought about. So considerable has been the result obtained in some cases that the writer has come to regard this gradual extension and loosening as an important part of the treatment in these cases." When one reflects on the amount of mental misery these scars often cause, their removal becomes an object of great importance.

Nitrate of Lead in Cancer of the Cervix Uteri.

M. Cheron, in the *Revue des Maladies des Femmes*, says that he has had very good results from the direct application of the nitrate, powdered, to the ulcerated cervix. After touching the ulcerated surface with glycerine, he injects about a quart of cold water, containing about a drachm and a half of tr. ferri perchlorid., and then dries the surface with absorbent cotton. Finally, the following powder is introduced, by means of a syringe made for injecting powders:—

℞. Plumbi nitrat., pulv., ℥ ss
Lycopod., pulv., ℥ j. M.

The powder is retained in place by a tampon of cotton. Through this means suppuration diminishes considerably, as also the bad odor. Even hemorrhage is not so profuse, and in some cases it is entirely suppressed.

Hydrobromic Acid.

Dr. W. B. Moir says, in the *Lancet*, that he has obtained some excellent results from the use of this acid. A young lady complaining of severe and frequent headaches, accompanied with flushing of the face, and at times with ringing in the ears, was encountered. She seemed

perfectly healthy, and there was no appreciable cause for this condition. She was ordered fifteen minims of the acid, thrice daily, after meals, in a little sweetened water. This treatment was continued for three weeks (the dose being increased first to twenty and subsequently to twenty-five minims). The happiest possible results ensued, and complete relief was afforded. Given in combination with quinine, he has found it to mitigate or entirely prevent the headache which often accompanies the use of that drug. In a case of persistent toothache, occurring during pregnancy, he obtained very satisfactory results from the use of this acid.

Special Reports.

NO. VII.—HEART DISEASES.

MALIGNANT ULCERATIVE ENDOCARDITIS.

In the *Medical Times and Gazette* Dr. Sidney Coupland records several cases of heart disease to which he prefixes the term *malignant* to denote simply the clinical fact of their fatal progressive course, without reference to their etiology. In two of the cases reported there was a previous history of rheumatism, while in a third there was no certainty but a probability of such history He calls particular attention to the irregular and pyæmic character of the pyrexia, which in one case was so strikingly periodic as to closely resemble intermittent fever. He believes that the combination of endocarditis with such a form of pyrexia is enough to justify the gravest prognosis, and to stamp the heart lesion as "*malignant.*" The cases recorded are all so similar in clinical history that the symptoms of one will serve to describe all. A man, forty-one years of age, had enjoyed good health all his life, with the single exception of an attack of gonorrhœa twenty years ago. Two months before admission to the hospital he took cold and was seized with pain in the left leg. The pain finally left him, but he seems not to have felt well, and five weeks before admission began to suffer from shivering fits. These attacks would come on at irregular intervals, sometimes every third day and sometimes every fifteen hours, so that he imagined he had the ague. Each attack was accompanied with vomiting, sometimes of food, sometimes of clear or bile-stained mucus, and was followed by an intense thirst and an intolerable sense of heat and discomfort. He was troubled with insomnia, lost his appetite and became very weak. He had no pain, but on December 31st, 1881, he noticed that his legs swelled a little toward night. He was admitted into the hospital January 3d, 1882, in the following condition: He was spare and sallow, face marked with acne rosacea. Much depressed and had a spell of shivering. Temperature 101.2°, hot and very thirsty. Not sweating. Tongue dry, glazed, cracked, but not coated. Physical signs of lungs practically normal. Cardiac dullness normal. Apex beat in fifth interspace one inch and a half below and half an inch to the sternal side. There is a rough systolic bruit at the apex; no thrill. The pulmonary second sound is ringing; the aortic is dull. Area of hepatic dullness normal, splenic increased, reaching from seventh to eleventh rib. Abdomen full and tympanitic. The temperature being the most marked and characteristic symptom, it was at first supposed that the man was suffering from ague, and quinine was administered freely, but had no effect whatsoever. The existence of the endocardial murmur and the great constitutional disturbance led to the diagnosis of malignant endocarditis of pyæmic type, which opinion was strengthened by the appearance of albumen, and later on of blood, in the urine. The following is the temperature record:—

January 4th. 2 30 A.M., 99°; 4 A.M., 102.8°; 8 A.M., 104°; 5 P.M., 99.8°; 5.20 P.M., 99.4°; 6.35 P.M., 103.6°; 10.15 P.M., 105.8°.

January 5th. 11.30 A.M., 100.2°; 12.20 P.M., 102.4°, 1.40 P.M., 104.2°; 4.45 P.M., 105.2°.

January 6th. 3.30 A.M., 98.6°; 5 A.M., 104°; 8 A.M., 105.2°; 9 P.M., 99°; 10.15 P.M., 103.6°.

January 7th. 2.15 A. M., 105°; 1 P.M., 97.8°; 2.30 P.M., 103.6°; 6.30 P.M., 105.2°.

January 8th. 5.30 A.M., 100°; 6.45 A.M., 103.6°; 10.45 A.M., 105.2°; 9.15 P.M., 98.40°; 9.30 P.M., 99.2°; 10.45 P.M., 103°.

January 9th. 2 A. M., 104 4°; 11.45 A.M., 99.2°; 1.30 P.M., 104.4°; 4 P.M., 104.4°.

January 10th. 1 A.M., 99.2°; 2.45 A.M., 100°; 4 A.M., 103.8°; 7 A.M., 103.8°; 3 P.M., 100°; 5.10 P.M., 103.4°.

January 11th. 5 A.M., 99.4°.

This is truly a curious temperature record, and one that would cause any physician to administer quinine, unless he bears in mind the present recorded cases. The pyrexial period, throughout the disease, averaged about five hours and a quarter. The patient grew gradually worse, the breathing became shallow and rapid, and death occurred rather suddenly on the afternoon of the 11th.

In one of the cases, shortly before death, the temperature fell to 95°. As a rule, ulcerative endocarditis is an acute disease, engrafted

upon already diseased valves, but exceptions to this rule are recorded. The natural tendency of endocarditis, from whatever cause, is to the formation of fibrinous deposits on the inflamed and altered tissue of the valves. These vegetations may and often do excite, by their friction against the walls of the heart or opposite valves, localized patches of inflammation proceeding to ulceration. In that way, cardiac aneurisms and aneurism of the aortic or mitral valve may be set up.

In the *Transactions of the Pathological Society* for 1876, page 73, Dr. Coupland recorded a case where a mitral aneurism originated from the friction of aortic vegetations. Several similar cases have been reported by Drs. Ogle, Moxon, Fagge, and Legg. Vegetating endocarditis may be *simple*, it may lead to embolism and to secondary ulceration, without presenting the clinical features of *malignant* or ulcerative endocarditis. Hence the term "ulcerative," as applied solely to these *malignant* forms, those in which the clinical history is rather that of septic fever than of heart disease, is misleading. For this reason, the term *malignant*, as originally employed by Virchow, has been used to distinguish these septic cases. There must be some element superadded to ordinary ulcerative endocarditis to impress upon it these peculiar clinical features of malignancy. That element has been discovered by Heiberg, and confirmed by Klebs, Osler, (*Seguin's Archives*, February, 1881, page 44), and others, in the presence of fungoid organisms in these vegetations. The clinical distinction has long been known, and the term *septic endocarditis* was in use long before the phrase *mycosis endocardii* came into being. Jaccoud, in the "Dictionnaire de Medecine et Chirurgie," Vol. xii, 1870, clearly discriminates between vegetating endocarditis and *septic* endocarditis. Quite lately Dr. Goodheart directed the attention of the Pathological Society to the fact that cases of vegetating endocarditis are prone to occur whenever septic disease is prevalent. In what manner the valves of the heart become the seat of this mycosis, it is impossible, with our present knowledge, to state positively, though many theories have been advanced. It must be remembered that the cardiac lesion may be the result and not the cause of the blood contamination. Once formed, however, the diseased vegetations become the foci for the metastatic dissemination of the septic organisms. Given, then, signs of endocarditis, with the above pyrexial type, and constitutional symptoms of a typhoid character, and there can be no doubt of the nature of the case, and of the lethal prognosis that must be made in the presence of such indications. Unfortunately, no mention is made of treatment, but in one case where uræmia seemed imminent, diuretics warded off the fatal termination for a time. It would seem, if the theory is true, of the parasitic nature of the disease, that antiseptics would, probably, have a good influence, though that question is yet undecided.

In the *British Medical Journal*, Dr. Samuel Wilks, writing about Ulcerative Endocarditis, says: "It is a disease full of interest and importance, for not only is its pathology obscure, but the symptoms are so often illy defined, that it is constantly mistaken for other complaints, and especially for the various forms of fever. The patient is generally in a highly pyretic state, or in that condition which is ordinarily styled typhoid, without presenting any characteristic symptoms, the only sign present to raise a suspicion of the true nature of the case being a cardiac bruit. The case is really one of blood poisoning or septicæmia, the source of the infection being, as it is supposed, in the heart, or in any place near the centre of circulation where ulceration and vegetations exist; but whether the septic material be decomposed fibrin, or the *debris* arising from the breach on the endocardium, or whether there be any distinct infectious substance circulating through the system, is still a question. For some years past it has been known that persons have died with symptoms of typhoid fever or pyæmia, and the necropsy has revealed the presence of fibrinous masses, or infarcts, in the spleen and kidneys, and that associated with these deposits there have been vegetations on the heart, usually of recent formation and situated on chronically diseased valves. Owing to the fact of one organ being especially selected for the manifestation of the infection, the inflammation attending it may be regarded as primary, and the real nature of the complaint overlooked. It is probable that in former years this mistake was constantly occurring. In one of my cases, probably owing to a plugging of some of the cerebral vessels, a meningitis was set up. In another case, the patient had empyema, and which, in spite of being treated by the best methods, seemed to be the cause of death; the autopsy, however, revealed an ulcerative endocarditis. When the symptoms are those only of blood poisoning, they are not always of the acute kind, but may continue over a course of several weeks and then put on the appearance of an intermittent fever. Again, a

patient suffering from known heart disease is attacked by febrile symptoms, pains in the joints, etc., and ultimately recovers. The case is regarded as one of subacute rheumatism, but it is truly one of blood poisoning, and the proof lies in the condition of the organs found after death. In the spleen and kidneys may be found infarcts of different ages, some recent, others drying up, and on the surface of the organs indentations and cicatrices indicative of the presence of much older deposits."

HYPERTROPHY OF THE HEART.

Dr. Samuel West recently exhibited to the Pathological Society, of London (*Lancet*), an hypertrophied heart from an ostler, aged 41, with the following rather peculiar history. He was well until three months before admission to the hospital. He then suffered from dyspnœa, pain and palpitation. The heart was found very large, no murmur, the arteries were hard, the lungs were emphysematous, and there was a small amount of albumen in the urine. Chronic Bright's disease was diagnosed. He became unconscious and died. At the autopsy the kidneys were congested, but otherwise healthy, no sclerosis. The heart weighed twenty ounces, was very large, slightly fatty, no disease of valves, and no cause of the hypertrophy, which was limited to the left ventricle, was found. It was, therefore, a case of cardiac hypertrophy without any of the usual causes being present. It also demonstrated how such a heart may break down without obvious reason. It was suggested that the coronary arteries did not increase in size in proportion to the increase in size of the heart, and so a point was reached where the blood supply was deficient and fatty degeneration ensued.

(*To be Continued.*)

CORRESPONDENCE.

Medical Status in Cleveland, O.

ED. MED. AND SURG. REPORTER:—

Knowing that your readers are aware that the next session of the American Medical Association will be held in Cleveland, your correspondent thought you might not be averse to a letter from this point about the Profession, the Colleges and the Medical Institutions of this city.

At the present time such a task is an easy one. In fact, the prevailing subject of conversation and the greatest item of local interest is medical Colleges, Medical Graduates, and Professional Training. This subject has received impetus from the fact that two of the leading universities of Ohio—the University of Wooster and the Western Reserve University—have medical departments here, between which a peculiar controversy is waged. About a year since an effort was made to unite these two medical schools, and effect such a conjunction of their otherwise conflicting interests as would make one very large, well-supported institution, devoted to medical teaching. It is said that the two faculties met and selected a new corps of teachers—one-half from each school—and entered upon their new programme with well grounded hopes of succest. At first it seemed as if the consolidation would be approved by everybody, but opposition sprang up in an unexpected quarter; the Trustees of the University of Wooster, to the surprise of every one, announced most emphatically that at no time had they even contemplated the discontinuance of their medical school; that they had never authorized any action that could be construed as favoring such a step; and concluded by ordering the professors who had gone into the consolidation to return to their old position and resume their former duties. The professors, not putting in an appearance before the day set for opening the next session, the Trustees vacated their chairs and postponed the winter session of 1881-2 until the spring of 1882. This delay gave the Trustees time to organize the Faculty. Professors Firestone, Miller, Pomerene, Strong and Foote, of the former Faculty, remained. To this number the Trustees added Drs. F. J. Weed, J. E. Burns, T. A. Weed, Charles Arms, and L. B. Tuckerman, of Cleveland, and Dr. George Mitchell, of Mansfield. They also secured the services of Professor Xenophon C. Scott, formerly connected with the other College, who took the chair of Ophthalmology and Otology. Professors Reuben A. Vance and George Hunert, of Cincinnati, O., resigned their positions—the former in the Cincinnati College of Medicine and Surgery, the latter in Miami College—to take the chairs tendered them. Dr. Vance succeeded Dr. Gustav C. E. Weber as Professor of Operative Surgery and Clinical Surgery; Dr. Hunert took the chair formerly held by Dr. W. J. Scott—that of the Principles and Practice of Medicine and Clinical Medicine. The new Faculty sustained a heavy loss in the sudden death of Professor Joel Pomerene, an amiable and highly intelligent gentleman, whose early demise was mourned by a large circle of friends. The faculty, thus organized, began work the first week in March. Despite all the obstacles they had to contend against, the session was a successful one. The class numbered over forty. The graduating class embraced just twenty aspirants for a degree. The final examinations were written and continued through a whole week. A great outcry was raised so soon as the first day's questions were made public. It was claimed that the questions were unusually hard and that the examinations were unnecessarily severe. The excitement reached its highest pitch the beginning of the second week, when the Censors and Faculty reviewed the examination papers and announced that of the twenty would-be doctors seven had failed to attain the standard of proficiency established by the Trustees, Faculty and Censors. At the Commencement, Monday evening, July 3d, the Vice-Dean (Dr. Vance) announced that the position taken by the Faculty was one the medi-

cal profession had long been demanding; it was not assumed in fear and trembling, for the Faculty were so situated that the mere number of students they had in attendance was a minor consideration; and that it would be adhered to under all circumstances, for they were sure that there were enough earnest and sincere men in the profession standing ready to encourage such a departure in medical training to justify them in the step they were taking. The supporters and friends of the other college are divided in their views as to what the consequences will be. A number of them have no hesitation in saying that they think Wooster University has gone too far; that no medical college can be supported by its fees and make such demands of its students. To these gentlemen the outlook for Wooster is gloomy indeed. Another class argue that a high standard is desirable; these gentlemen are prone to speak in doubting tones of the advantage to the profession of a college which, out of a class of eighty, for instance, can send forth eighty doctors of medicine! They stand willing to support the institution that gives the best instruction and has the highest standard. There is no doubt, however, that the body of the profession here are pleased at the action of Wooster, and will support any college that will aid in checking the advent into their ranks of ignorant men, who look upon medicine as an easy trade at which to make money.

In addition to the two established regular Colleges, Cleveland can boast of two hospitals, the wards of which are open for Clinical teaching in Medicine, Surgery, and Obstetrics. These are Charity Hospital, under the control of the Medical Department of the University of Wooster, and the Cleveland City Hospital, managed by the Faculty of the Medical Department of the Western Reserve University. The surgical clinics at these institutions are especially interesting, and are held in amphitheatres arranged for such demonstrations. At the City Hospital, Professor Gustav C. E. Weber has charge of the surgical clinic, and his skill and reputation not only bring patients from all over the country, but are great attractions to students who throng there to hear him lecture. The Charity Hospital surgical clinic is held on Tuesdays and Fridays, by Dr. Reuben A. Vance. At this institution there are clinics of some kind every day. Here Professor X. C. Scott holds his eye and ear clinic; Dr. Miller, his gynæcological clinic, and Dr. Burns, his children's clinic. In fact, so far as facilities for clinical teaching are concerned, Cleveland stands first among the cities of the West.

Vigorous preparations are already being made to give the American Medical Association a cordial welcome here in 1883. Dr. X. C. Scott, the chairman of the Committee of Arrangements, is an indefatigable worker, and his efforts will be warmly seconded by every member of the Profession, not only in this city, but in the State of Ohio. The State Society appointed a committee to confer with the Committee of Arrangements, and upon separating, adjourned to meet here at the same time with the American Medical Association. It was suggested that the action of the Association in reference to the Minnesota State Society at St. Paul be a good precedent to follow in the case of the Ohio State Society at Cleveland. There the State Society met, transacted the necessary routine business, and then, at the request of the Association, adjourned, to enable its members to become "members, by invitation," of the latter. We anticipate a large attendance and a successful session. That many of the readers of the MEDICAL AND SURGICAL REPORTER will visit us next year, and that all will have a good time, is the sincere wish of

MEDICUS.

Cleveland, Ohio, July 7th, 1882.

The Causes of Labor Before and at Term.

ED. MED. AND SURG. REPORTER:—

Various reasons have been assigned, time and again, as to the causes of the onset of labor at term and before, but none have been altogether satisfactory. The theories have lacked practical demonstration. Now I have often thought carefully over the subject, and have finally come to the following conclusions:—

1st. In the event of the death of the fœtus before or at term, be it from either partial or total detachment of the placenta, or any other cause, it becomes a foreign body in the uterus, and as such acts as an irritant to the organ. Let us suppose that the placenta has become detached. The fœtus now loses its nourishment, the oxygenating blood and the development ceases. Acting as an irritant to the uterine walls, the impulse is conveyed by the nerve filaments to the ganglionic centre, whence it is reflected back to the uterus, the result being a contraction. Again, gestation having ceased the uterus is not called upon to expand or increase in size to any greater extent to accommodate its contents, and, therefore, obeys the impulse to regain its normal state and size.

2d. But suppose the fœtus to have reached full term? When the fœtus reaches the end of gestation, and the uterus is distended to its fullest capacity, what causes its expulsion? It is a well known fact that toward the end of pregnancy the fœtus becomes more and more restless than in the earlier months, and at term is not infrequently quite vigorous. The mother is capable of supplying all the oxygen necessary for the proper development of the child up to a late period, when it begins to clamor for more than she can supply: the heart, lungs, etc., have become fully devoloped and are now competent to perform their functions independently. Development has reached its height, and again, as in the case previously quoted, the fœtus becomes a foreign body. Irritation is set up by the strong movements, and by the same process contraction is induced. In the one case labor is brought on by the useless presence of a dead child irritating the nerve centres; in the other, by a living child, by its restlessness or by encroaching on the uterine walls, doing precisely the same thing.

When the apple is ripe it drops from the tree; it does so because it has reached its maturity and further nourishment is no longer possible nor required. The chick emerges from its shell, it having become fully developed, and, in fact, not

receiving any more nourishment craves for more. The leaf drops from the bough, the sap taking another course after performing its duty. Every thing, animate and inanimate, bows before nature's law of self-limitation.

Philad'a. ANDREW L. WITTKAMP, M.D.

Regular Medicine.

ED. MED. AND SURG. REPORTER:—

At the recent meeting of the Oregon State Medical Society the following resolutions were offered, but not adopted:—

Resolved, That we consider the practice of regular medicine consists, as far as therapeutics are concerned, in the use of every drug, medicine, method, ism or pathy known or supposed to possess curative virtues. "The whole unbounded continent" of remedies is ours, and we are not bound or restricted in our use of any curative measure, or to any exclusive method or medical doctrine.

Resolved, That we do not consider it a violation of medical ethics to consent to assist a patient under the care of a hydropath, homœopath or any other practitioner of a one idea plan of treatment; but should consider any regular physician very imperfectly qualified for his profession, if he ever required the assistance of any of the pathists or irregulars in his management of patients. C. H. M.

Removal of a Myo-fibromatous Tumor.

ED. MED. AND SURG. REPORTER.

Some few months ago I was consulted by Miss Dennis, aged thirty, medium stature, who informed me that she had had a bloody flux from the vagina for the past four years, and during the menstrual epochs the flow had been alarming, with an accompanying dysmenorrhœa, which anodynes failed to alleviate. Several physicians, including a gynecologist, advised her to be patient, as she was undergoing the ordeal of "change of life," and in due time she would be well. From the history of the case, I suspected that I had to deal with an intra-uterine tumor. My patient was at this time exsanguinated, dyspeptic, and anasarcous, in a word, bed-ridden, from pain and exhaustion. At the first vaginal examination nothing of note was revealed, save the bloodless hue of the parts. Unable to manipulate with the uterine sound, owing to stenosis, I at once instituted gradual dilatation of the cervix uteri, in order to search for the disease that was rapidly terminating the life of my patient. She was ordered to be kept at absolute rest, in the recumbent posture, her diet to be nutritious, with ferruginous tonics, and the vagina to be tightly and constantly plugged by tampon.

During the following month I succeeded in dilating the cervix to admit the index finger, when I encountered, with the aid of the uterine sound, a growth encapsuled within the fundus and the posterior uterine wall. By the use of the therapeutic measures named a status of health was reached that justified operative procedures. With the assistance of Dr. E. P. Irons and my student, Mr. Abbott, I proceeded to remove the tumor, after the mode described by Prof. T. Gaillard Thomas in his great work on gynecology (p. 544). My assurance of success was abundant, having at command Prof. Thomas' spoon-saw, my "sheet anchor" in the surgical handiwork. In one hour I was rewarded with the privilege of presenting to the friends of my patient the entire tumor, weighing one pound and three-quarters.

By the hypodermic use of the bi-muriate of quinia for a few days, the temperature was kept within the bounds of safety. In one month from the date of operation her convalescence was speeding into recovery. At the time of writing she is enjoying excellent health, being free from discomfort of every kind.

Baltimore, Md. G. GLANVILLE RUSH.

A Mistaken Diagnosis.

ED. MED. AND SURG. REPORTER:—

A case of sickness occurred twelve miles from Fort Worth, Texas. A country physician in attendance was asked if the case was not one of smallpox. He, in reply, stated no, that the case was one of extraordinary interest, and without parallel in his whole reading or personal experience. Further, that he would wager that, should Dr. A., B. or C. be called from Fort Worth they would corroborate his diagnosis, which was that the man had "erysipelas from the toes to the knees, measles from the knees to the waist, and seven years' itch from the waist to the top of the head. An intelligent physician being called in readily diagnosed confluent, smallpox. The sequel proved the correctness of the last diagnosis, as several persons contracted the disease. The first physician, to the credit of Texas, is not a native. The last was.

Fort Worth, Texas. VERITAS.

NEWS AND MISCELLANY.

Singular Legacy to the French Government.

M. Giffard, the well known Parisian inventor of balloons, who died some time ago, has left a legacy to the French Government, under the most singular conditions. He desires that it be devoted to the establishment of *suicidaria*, or national institutions in which persons suffering from painful and incurable diseases may be allowed, by the use of chloroform and other such agents, to shorten their own existences, acting under the direction of medical experts, and with the consent of their friends. M. Giffard secured a euthanasia for himself by a special apparatus he invented for the inhalation of chloroform. M. Renaud has joined the movement for the promotion of painless suicide in France, his only stipulation being that no man shall, by law, be entitled to take his own life, until he has obtained the consent of his friends in what is known as the *conseil de familie*.

The Late Sir John Rose Cormack.

At a meeting of the friends of the late Sir John Rose Cormack, at the house of Dr. Semple, it was decided to organize a committee for the purpose of raising a fund for the benefit of Sir John's family, for notwithstanding the devotion of a long and laborious life to his profession, he has died without leaving any provision for his widow and children. A committee for the same purpose has already been formed in Paris, and subscriptions have been forwarded to that quarter. The London committee consists of Sir J. Risdon Bennett, Dr. Quain, Dr. A. P. Stewart, Dr. B. W. Richardson, Mr. W. H. Michael, Q.C., Dr. Thudichum, Dr. McIntyre, Dr. Semple, and Dr. A. Henry, Secretary. Dr. Semple was appointed Chairman of the Committee, and Dr. B. W. Richardson, Treasurer.

Items.

—Dr. George Elder, resident surgeon at the General Hospital, Nottingham, England, has, we understand, just performed nephrectomy for scrofulous disease.

—The Boylston Prize Essay given by Harvard University has been obtained by Th. M. Dolan, F.R.C.S. ED., Halifax, Yorkshire; value of prize $300, the subject of the essay being "Sewer Gas."

—A whole family, consisting of six persons, living at Murceaux, in the Department of the Seine-et-Oise, have been poisoned through eating poisonous fungi in mistake for mushrooms. Medical aid was sought, but to no avail, and all six died in great agony.

—Dr. Robert Koch, accompanied by Dr. Struck, the Director of the Imperial Board of Health at Berlin, had an audience of the Emperor on June 5, when he explained to his Imperial Majesty the results of his investigations on tubercle, and demonstrated his preparation containing the bacillus of that disease.

—Malarious fever, in an epidemic form, has of late been very fatal in the Mauritius. During April alone, there were no fewer than five hundred and ninety-six deaths, and these, unhappily, included some of the prominent officials of the island. The death rate from fever has been higher than in the previous five years.

—During the last fifteen months, as many as two millions of persons have been vaccinated and revaccinated in the State of Illinois. To this general vaccination is undoubtedly due the small progress that smallpox has of late made in the State—the disease having been, in the majority of cases confined to those first attacked.

—In his cross-examination of the surgeon, the lawyer said that a doctor ought to be able to give an opinion without making a mistake. The surgeon replied, "They are as capable as lawyers." The lawyer said, "A doctor's mistakes are buried six feet under the ground, a lawyer's are not." "No," said the surgeon, "but they are sometimes hung as many feet above ground."

OBITUARY NOTICES.

DR. ALFRED M. SLOCUM.

Dr. Alfred M. Slocum died June 21st, after a brief illness. He was born in Germantown, Philadelphia, December 2, 1822. He studied medicine, and graduated from the University of Pennsylvania in 1847. He was a skillful and thoroughly conscientious physician, but so modest and retiring that his abilities were, perhaps, not as widely understood and appreciated as they should have been. His life record was written in deeds. For one year after leaving the University he was physician at the Wills Hospital. For six years he was resident physician at the Northern Dispensary.

He was, for ten years, visiting physician at the Episcopal Hospital, and for sixteen years at the House of Refuge. He was also visiting physician at the Charity Hospital and the Magdalen Society.

As a member of the Philadelphia College of Physicians and the County Medical Society, he was esteemed by his fellows, and respected alike for his talents and his unvarying courtesy.

Dr. Slocum was never a robust man, and suffered, at times, from disease of the heart; this chronic trouble doubtless being the cause of death. He was a member of St. Philip's Episcopal Church, a true Christian, and an affectionate husband and father.

QUERIES AND REPLIES.

J. C. W.—For the skin troubles arising from poisoning by poison ivy you may use fl. ext. grindelia robusta, f℥ij to f℥iv of water, as a lotion, also a saturated solution of hyposulphite of soda. Sulphate of zinc is also good, a few grains to the ounce.

A and B.—B's conscience must be his guide. If he did nothing and said nothing to lessen the confidence of the patient, his family or friends, in A, and acted in every particular strictly in accordance with the ethics governing consultations, then he can and ought to accept the call to treat the case.

MARRIAGES.

ADAMS—SMITH—At the home of the bride, Berwick, Pa., June 15th, by the Rev. A. B. Smith, brother of the bride, assisted by the Rev. W. W. Evans, A.M., Mr. Louis J. Adams, M.D., of Evansville, Pa., and Miss Clara V. Smith.

BOTKIN—HAUCHER—At Claysville, by the Rev. A. A. Mealey, assisted by Rev. J. L. Leeper, Dr. L. C. Botkin, of Burgettstown, Pa., and Miss Annie C. Haucher, of Claysville, Pa.

CHALFANT—WEBSTER—June 14th, 1882, by Rev. J A. Cook, in the Presbyterian church of Jewett, Ohio, Dr. Robert W. Chalfant, of Logan county, O., and Miss Maggie Webster, of Jewett, Harrison Co., O.

FERGUSON—CAMPBELL—On Wednesday, June 7th, 1882, at the residence of the bride's parents, by Rev. Gracey Ferguson, William Ferguson, M.D., and Mrs. Annie K. Campbell, daughter of John Kitchenman, both of Philadelphia.

DEATHS.

GOLD—In this city, on the 12th of June, Hiram Gold, M.D., in the 49th year of his age.

SLOCUM—In this city, on the 21st of June, Alfred M. Slocum, M.D., in the 60th year of his age.

TREVOR—In this city, on the 13th of June, Dr. M. R. Trevor, of paralysis.

THE

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Communications.

PRACTICAL NOTES ON THE DIAGNOSIS AND TREATMENT OF ULCERS.

BY G. HALSTED BOYLAND, A.M., M.D., ETC.

Of the greatest importance is the classification of ulcers into such as owe their origin entirely, or at least essentially, to local causes—local idiopathic ulcers, and such as spring from inner constitutional causes—constitutional, dyscrasic, symptomatic ulcers. Those ulcers most frequently met with in general practice are the ones which will occupy attention in this article. They are: scrofulous, syphilitic and scorbutic.

Scrofulous Ulcers.—These originate, in the great majority of cases, in the direction from within out, notably from suppurating lymph glands and from bones in a state of chronic inflammation or ulceration; again, from cold abscesses that have broken outwardly; in some cases also from superficial pustules, generally in childhood; they get better in autumn and worse in spring; recur frequently, even after an apparent perfect cure—this likewise mostly in the spring. Their ground is pale and unclean, their borders lax, quite ordinarily undermined (sinuous ulcers) more especially in such as go out from lymph-glands or bones; the surrounding parts are livid, the secretion thin-flowing, mixed with cheesy flakes, often also cheesy in its entire consistency, in which case it is usually of tubercular character. Healing takes place very slowly, indeed, even with the best local and general treatment; cicatrization always begins only after the undermined borders have been removed, either by spontaneous necrosis or by the aid of art. The scar has a rayed and shining construction, and is therefore not unfrequently compared to the appearance of frost upon a window pane. This depends materially upon its long development and the greatness of the loss of substance, but not upon the specific influences of the scrofulous dyscrasia. The other characteristic appearances of habitus scrofulosus are always well marked in these cases.

Syphilitic Ulcers—Chancres.—These appear either as the direct local consequence of inoculation with syphilitic contagium, or as symptoms of the general affection caused by any manner of transmission of this contagium—lues syphilitica, constitutional syphilis. In the first case they are called primary, in the second, secondary ulcers. The primary syphilitic ulcers mostly locate themselves according to the infection, sometimes on the lips of the mouth, usually on the genitals, and under three essentially different forms, to wit: simple, soft chancre; indurated, infectious chancre and phagedænic chancre.

The simple, soft chancre has a round form, an even ground, a sharp-cut border, as if made with a punch, rolled a little outward and slightly undermined; the secretion is unproportionately rich, thick, of a whitish yellow or yellowish green color, and in the highest degree infectious. The surroundings and the ground of the ulcer remain in the normal state of tissue and are, as a rule, free from induration. Nevertheless, cases do happen, in which, partly after the exhibition of medicines, partly also without them, a hardening in the ground of the ulcer takes place,

which we designate as inflammatory, and which, in point of fact, does not differ from other processes of inflammatory induration. Soft chancres are found several together on the same individual oftener than one single one, as they either appear at once, three or four in number, or increase gradually by local infection from one original ulcer. Swelling of the lymphatic glands belonging to the diseased side, mostly the inguinal glands (buboes in strict sense) can sooner or later complicate soft chancre, but are much more frequently absent. When they do come, they remain almost always upon the diseased side of the body, are limited to the superficial glands, and can as easily end in discussion as in suppuration. In the latter case, after the glandular abscess has broken, simple cicatrization or ulceration follows. Cicatrization may then be expected when the abscess had its seat, not in the gland itself, but in the peri-glandular connective tissue. If ulceration of a bubo occurs the secretion is again contagious. Inoculations with the pus of such a bubo or of a soft chancre have always brought about the development of a soft chancre, even when made a thousand times on the same individual. Whenever the inoculation is repeated a soft chancre always comes again, immediately, and without a period of incubation. On the soon reddened point of inoculation, and within the first twenty-four hours, an inflammatory speck is developed, on the summit of which a small pustule filled with water, clear liquid, is formed by pushing up the epidermis.

Its contents become gradually turbid, until the third day, when it already attains the size of a pea, and sinks like a navel in the middle. Often this itching pustule is intentionally disturbed or destroyed by chance, in scratching; otherwise it finally bursts and leaves, generally between the seventh and tenth days after inoculation, the ulcer that has developed underneath, with the above-mentioned characteristics. Seldomer the pus-like contents dry in, and a brown crust is formed, that sits fast upon the ulcer, without causing it otherwise to differ from the nature of soft chancres. In its further course the ulcer grows, retaining its round form, at times more at others less in the surface, and thus sometimes neighboring ulcers run together. In most cases the granulations going out from the ground of these ulcers are not idle; often such flesh papulæ grow up too rankly, so that an ulcus fungosum is developed, that can have pathological anatomical resemblance to broad condyloma. Generally, however, unless the ulcer assumes a phagedænic form, cicatrization follows within several weeks, and without surgical or medical interference. When this begins the secretion of the chancre sometimes ceases to be infectious: but often it retains its power of contagion until cicatrization is ended.

The indurated or infecting chancre is much rarer than the soft chancre, and appears, in most cases, one alone, in parts of the body suited to it. Its form corresponds, as a rule, to that of the soft chancre; but the entire surface of the ulcer appears smooth, varnished like, the ground fatty, whitish-gray colored, and darkly pointed in the middle. The somewhat erect borders are not undermined, the secretion is much more sparse, and much more like good pus than in the first kind of syphilitic ulcers. In accordance with the name, the ground and surrounding of an indurated chancre exhibit a remarkable cartilaginous hardness, which mostly extends to a considerable depth, seldom remains confined to the superficial layers, and still seldomer surrounds the ulcer in a circle. This induration is distinguished from the before mentioned inflammatory one by the absence of redness and pain; on the other hand, it is customary to find diminished sensibility in the hardened parts. In the corresponding lymph glands is regularly developed, within the first fourteen days after the appearance of the chancre, a painless, above all not inflammatory swelling, and therefore, in the beginning, always without participation of the peri-glandular tissue, from which, mostly after some time, the analogous glands of the other side are also affected, even though less severely. These so-called indolent buboes form very nodulated tumors, corresponding in quantity to the number of the diseased glands. They last, as a rule, much longer than the chancre that produced them. By direct attack, and by great exertion, inflammation, and then suppuration, with consecutive breaking out, can be brought about in them.

In scrofulous subjects this happens very easily and often without any apparent cause. Inoculation with the pus of an indurated chancre or from the bubo depending upon it, on the same body, which is already or was affected by ulcers of this kind, is never followed by any result. If this transmission, on the other hand, takes place for the first time, either intentionally or by accident, the secretion of the indurated chancre proves to be decidedly contagious. After an incubation period, of from two to six weeks, a pimple-like knot appears, which soon begins to ulcerate from the middle to the circumference, and without much pain, at times quite unnoticed, changes into the character-

istic ulcer. The further course until the, also in this case possible, cicatrization of the ulcer without the aid of medicine or surgery, lasts from four to six weeks; this takes place, at first, by the shooting out of good granulations from the border, and goes on generally in centripetal direction, seldom equally over the whole surface. Exceptionally the growing ulcer-granulations change into broad condyloma. The induration remains, as a rule, after cicatrization, sometimes only a few weeks, sometimes for years, and then gradually disappears. If the chancre had its seat in the outer skin, the scar then retains often still longer a characteristic, dark color, that is never observed after a soft chancre. The distinction between these two different kinds of syphilitic ulcers, after the above given description, will present no especial difficulties. It is, however, essential and necessary, because in soft chancre it is a question of a malady that very seldom, perhaps never, is followed by disease of the rest of the body; whereas, constitutional syphilis not only follows with great certainty an indurated chancre, but also appears already during the incubation period of the ulcer to develop itself with it, so that we may, with more right, regard the induration as first symptom of the general affection than the direct effect of local transmission.

Phagedænic chancre is such an one as appears with gangrenous disturbance spread widely around it. Phagedænic chancre presents in a wide surrounding inflammatory and œdematous swelling, its ulcerous grounds showing a resemblance to the diphtheritic coating that is seen in hospital gangrene. This character, which in every respect offers analogies to nosocomial gangrene, is ordinarily first assumed after the chancre has existed already for some time, much oftener in soft than in indurated ulcers, and is to be regarded as a complication, which it is true must be especially described, but by no means justifies us in designating it as a distinct species. All that will be said with reference to the contagiousness of the secretion, the rarity of a general affection, the kind of buboes, and so forth, in speaking of phagedænic chancres, finds its explanation in the fact that most soft chancres are subject to this complication. The at times more ulcerous, at others more gangrenous disturbance—the latter also designated as gangrenous chancre—spreads itself more along the surface than in the depths, quickest in connective tissue, next to that in the skin, with less facility in other tissues.

The shape of the ulcer is usually irregular and serrated, the border sinuous, often widely undermined. Healing of this extended disturbance takes place the more slowly because mostly weakened or otherwise diseased individuals are subject to this complication.

Secondary syphilitic ulcers develop themselves on different parts of the body; at times on the mucous membranes, at others on the outer skin. In the first case the mucous membranes of the palate and pharynx are the seat usually preferred. On the outer skin appear the most forms of syphilitic exanthema, the so-called syphiloids, now pustules—ecthyma, then blisters—pemphigus, rupia; again tubercles, etc. Or there are buboes that have broken out, or syphilitic gummy tumors, finally inflamed bones and caries. The last two symptoms may more properly be designated as tertiary ulcers, as it is customary to regard the local diseases out of which they spring as a tertiary condition. With more probability is the indurated chancre already classed by us in the primary ulcers, certainly, at least, its characteristic induration, to be regarded as *secondary;* that is, as a breaking out of the already developed general disease. As manifold as the forms of syphilitic exanthema, are also those of secondary ulcers; nevertheless, the serpiginous type seems to be more generally selected. But it is utterly impossible out of the form and appearance alone, to determine with certainty the syphilitic nature of such an ulcer; on the contrary, the history of the ulcer itself, and the condition of the whole surface of the patient's body, especially the presence of any eruption, the continuance of induration on places of first infection, the swelling of the lymph glands, and finally, the anamnesis in its widest sense, must aid us in fixing a diagnosis. Perfect certainty is often arrived at only *ex purantibus et nocentibus.*

Scorbutic ulcers are caused by reason of faulty nature of food generally, favored by long exposure at the same time to moist air. These are the results of a general disease, being brought out directly by effusions of blood in and under the skin, with lively pains, on the thigh, the external and internal gums. Their ground is nodulated, unclean, usually of a bluish-red color, as the tissues, becoming necrotic, are infiltrated with half coagulated blood. The border is loose, and, like the surrounding of the ulcer, often œdematous and filled up with blood; sometimes loose, easily bleeding granulations grow up out of it. The secretion is very thin, mostly tinged with blood, and of a disagreeable, sweetish odor; the remaining scars are livid and shining.

Lupus.—The ulcerative form of lupus is more common than the exfoliative or serpiginous. After the primary appearances (pustules, small knots or spots) have existed for some time, they multiply, either with inflammatory symptoms, or the diseased skin or mucous membrane becomes covered with a diffuse redness, swells also by œdema, and here and there the thin epithelial layer is broken through. The, at first, small, round, very little or not at all painful ulcers spread themselves, either in breadth or depth, run into each other from all sides, and then get irregular, serrated borders. They become covered with brown, fast adhering crusts, under which a yellowish, thick, or brownish, thin mass is continually forming. If these crusts, which are generally dried fast on and in layers one above the other, be removed, bleeding easily follows from where they sat, from the hyperæmic, weeping borders of the ulcer. The crusts always gain in thickness as the depth of the ulceration increases, until, as for instance on the nose, not only the skin and muscles, but also the cartilage and bones are attacked. The superficial lupus, as also the deeper, can cicatrize spontaneously, by diminution of the hyperæmic tendency. The scars are the scars of gangrene; white, more or less elevated, folded strings, with great inclination to shortening. Often they break out afresh, when the pustules or knots in the periphery ulcerate. From many sides, and with right, the resemblance of lupus to syphilitic disease is dwelt upon. With lupus there is very frequently scrofulous diathesis. According to Cazeneuve, the small knots and tubercles that form under the influence of a syphilitic dyscrasia are more voluminous, rounded, and have the above-mentioned dark (copper-red) color; they are not, like those of lupus, covered with whitish epidermic scales, continually pushing each other off. The syphilitic tubercle usually is found in older individuals; on the other hand, lupus selects childhood and youth. Ulcerating, syphilitic tubercles have swollen, reddened, zigzag borders. They spread in depth or on the sides, in sinuous pockets, and cause, in course of ulceration, fistulous passages under the skin; while the ulceration of lupus always begins on the surface, and with this, makes its appearance much earlier than that of syphilitic tubercle. The neighboring bones, *e. g.*, the inferior maxillary, ossa nasalia, are, in lupus, only laid bare, so that they may be seen in the ground of the ulcer, without apparent change, while syphilitic ulceration attacks them. Beyond these, the other pathological conditions of the body caused by syphilis offer always distinguishing features. In many cases the distinction is possible from these alone.

Treatment of Ulcers.—If the ulcer rests upon a dyscrasia, this must be removed. Undoubtedly the therapy of dyscrasia belongs essentially to the field of inner medicine. Therefore, in this place it will only be regarded in so far as it may have reference, in helcology, to the most salient dyscrasic affections—scrofula, syphilis and scurvy. The most important point in the treatment of scrofula is to procure for the patient easily digestible, nourishing food, and to keep him in pure, warm air. Only when these conditions can be fulfilled is help to be afterwards expected from the untold number of drugs recommended. Among these the most seem to have for their only object an increase of the general nourishing. In this view is recommended in very large quantities and only in very large quantities continued for some time, cod-liver oil, phosphate of lime, preparations of iron, and the so-called bitter medicines, which last, perhaps, only work by increasing or regulating the appetite.

From another list of medicines is expected a specific change in the general process of nutrition. Here belong, particularly, the preparations of iodine, antimonials, salt baths, whose percentage of iodine and bromine is also brought into consideration. While the pharmaceutical preparations of iodine and antimony are followed by doubtful results, in so far as they are not confined to very small doses, and are used even not without danger; there is only one voice as regards salt baths (natural and artificial). Undoubtedly their greatest efficacy consists principally in enlivening the skin. Frequent baths in general, with good diet, should be ordered.

In the treatment of syphilitic ulcers we must start on the hypothesis that, through every primary ulcer, perhaps, a general infection will follow; the removal, then, at the earliest possible moment, of the infecting ulcer (chancre) is strongly urged as a prophylactic measure against constitutional disease. The newly grown or still developing primary chancre must be thoroughly cauterized. The choice of caustics is not, indeed, of so much consequence as is claimed by many authors; and yet caustic potash, Vienna paste and chloride of zinc, on account of their fundamental workings, are preferable to nitrate of silver (lapis). This prophylactic cauterization must appear foolish to those who hold it proven that soft chancres have never secondary consequences, and are only a harmless local affection; and that the incurated chancre already belongs to

secondary syphilis. In the first instance, cauterization would be of no use; in the last, alike useless, because "too late." But as long as the correctness of this opinion, held by us also as highly probable, remains doubtful, it is the duty of the practitioner to advise cauterization for all fresh chancres. And even if in hard chancre it is never possible to entirely destroy the poisonous, infectious matter, in loco, before its reception into the circulation, juices and tissue, it is, nevertheless, probable that its intensity may be modified by cauterization. However, an anti-dyscrasic treatment is indicated upon the appearance of induration, which need not necessarily be carried out in soft chancres, unless secondary symptoms show themselves. In phagedænic chancre the mercurial treatment was formerly warned against, as physicians thought it necessary to commence an anti-dyscrasic therapy in all cases of chancre, on the ground that the destruction of tissue was thereby hastened. As phagedænic chancres are almost always soft, reason for such a treatment seldom exists. Bardeleben* has never (after an extended experience) seen such injurious results from the internal employment of sublimate; and states further, "according to the analogy, the contrary should be expected, as sublimate, administered internally, in hospital gangrene, is recommended by the best authorities, as v. Pitha." The local treatment of phagedænic chancre forms part of that of hospital gangrene, while the ordinary chancre is treated essentially as an asthenic ulcer.

(To be Continued.)

* *Chirurgie und Operationslehre.* Berlin.

SICK HEADACHE; ITS CAUSE, HYPERMETROPIA AND ASTIGMATISM, EITHER ALONE OR COMBINED, AND ITS CURE, A PROPERLY FITTED GLASS.

BY G. C. SAVAGE, M.D.,

Of Jackson, Tenn.

In this article I propose to make known to the medical profession my discovery of the real cause and the successful treatment of sick head ache, that opprobrium of medical art from the beginning down to the present time. I shall give the circumstance that led me to the discovery, and shall offer arguments to convince others of the correctness of my conclusions.

One has said: "Headache destroys much of the happiness and cheerfulness of life, and reduces many a highly gifted and poetical soul to the level of a discontented drudge." This language is doubly applicable to sick headache, that dreadful disease which makes youth look forward to old age with a feeling of delight, and long for its approach, when, as he has been told, his malady will disappear.

I, for years, had been a sufferer from sick headache, and after becoming a member of the medical profession, sought from all sources a cure for my malady, but found none. I believed the teaching of authors as to the cause of the disease, viz., stomachal trouble, and took almost every remedy recommended, but continued to have attacks of greater or less severity every month, frequently twice a month. Finally I gave myself over to what I considered my unalterable fate, and thought of nothing as a cure for my disease but old age, and consequently, when suffering, would almost have a secret longing to be old, that I might be free. I had often wondered why it was that old age gave immunity, and turned in vain to authorities to find a satisfactory reason.

The Circumstances Leading to my Discovery.—My mother, from whom I supposed I had inherited my predisposition to sick headache, was a great sufferer from the same malady. I had seen her confined to her bed, frequently as long as three days, suffering almost as much as mortal could bear. She lived and suffered until age gave her ease. From 45 to 50 her attacks were less frequent and not so severe. She has had but few attacks since 50, and now, at the age of 58 years, she is entirely free from attacks, and has been so for several years.

During the last few years she has noticed that she cannot distinguish persons or things at a distance, as she once could, but she supposed that this was one of the natural consequences of age. She did not think about her freedom from sick headache having been purchased at the sacrifice of perfect distant vision.

In January of this year (1882) she visited me and spoke of the failure of her vision for distant objects. (Long ago she had commenced the use of glasses to correct her presbyopia). Hoping that I might be able to make her see better, I asked her to go into my office with me, where I could test her vision. I found the vision of her right equal to $\frac{20}{0}$, *i. e.*, at a distance of twenty feet from the card she could see only letters that a perfect eye could see at a distance of one hundred feet; while vision for left eye was equal to $\frac{20}{\text{lxx}}$. Her once latent hypermetropia had been converted, by loss of power in her ciliary muscle, into a wholly manifest hypermetropia, no astigmatism existing in her case. A spherical convex glass

of 24 inches focal distance gave her perfect vision in right eye, and a similar glass of 36 inches focal distance gave perfect vision in left eye. On questioning her a little the thought entered my mind, could not her far-sightedness have been the predisposing cause of her sick headache, and would not the simple glasses I now give her, if they had been given her in early life, have transformed her years of suffering into years of ease? This thought dominated me, and I went about the inquiry in earnest.

The books all say that age gives immunity; and knowing that age always converts a latent into a manifest hypermetropia, I at once sought out other old persons who from youth to age had been sufferers from sick headache, that I might see if they too were hypermetropes. I failed to find one who did not have manifest hypermetropia, and whose bad sight for distant objects did not come on as the sick headache disappeared.

The doctors with whom I have talked all say they do not know an instance in which sick headache did not give way between the forty-fifth and sixtieth years of age, but they can make no statement as to vision, whether it was good or bad.

In the meantime I continued to suffer. During January, February, and March, of the present year, I had a number of attacks of sick headache, perhaps as many as six. I know they were very frequent, and occasionally very severe. The more I used my eyes in reading and writing, the worse were my attacks. My investigations had led me to believe that hypermetropia is the cause of most, if not all, cases of sick headache (that form continuing through life, regardless of old age, if sick headache at all, must be due to some other cause), and I was only waiting for time to test my opinion, in my own case. In the latter part of March, of the present year, the premonitory symptoms of an attack of sick headache warned me of the ordeal through which I must soon pass, unless something could be done to avert it. I did not take the accustomed dose of chloride of sodium, which always gave me as much relief as anything I had ever taken; but had three or four drops of a one per cent. solution of atropia put in my left eye, the one always hurting me throughout an attack, my headache and eye-ache being confined to the left side. In half an hour my ciliary muscle was at rest, and I was perfectly free from pain and had no inclination to vomit, whereas, if the atropia had not been put in my eye, by the end of the same half-hour my headache would have been almost unbearable, and great nausea and vomiting would have attended, all to last and make me most miserable for several hours. I was most happy with the change I had experienced, and felt like crying out, "*Eureka!*" What gave me relief? The atropia had relieved the tension of the ciliary muscle, putting it at rest, and thus relieving its pain; and, there being no further cause for sympathy on the part of the head and stomach, the pain and nausea ceased. Although I had, apparently, perfect vision before the ciliary muscle was put at rest, I now found my vision equal to $\frac{20}{c}$, *i. e.*, I could see at a distance of twenty feet only letters that, before the atropia was used, when the ciliary muscle had its full power, I could have read at a distance of one hundred feet, and even these large letters seemed double. Now the condition of my ciliary muscle under atropia is just the condition natural and essential to a perfect (emmetropic) eye, when looking at distant objects, and yet the vision of an emmetropic eye would be equal to $\frac{20}{xx}$. Both hypermetropia and astigmatism existed in my eye, already at rest, for which I gave the full and proper correction. The glass correcting the defect and enabling me to see without straining, as well as a perfect eye can see, is a combination of a convex spherical of forty-two inches focal distance and a convex cylindrical of sixty inches focal distance, with its axis set at an angle of 95°. I afterwards found my right eye both hypermetropic and astigmatic, and gave it the proper correction. Since March I have been doing all my reading and writing with my glasses, with the exception of one week, and for laying them aside for only that short time, I paid dearly in suffering from a severe attack of sick headache. The reason for laying them aside was twofold, viz: 1st. I was using the heavy glasses and still heavier frames of my refracting case, which, on account of their weight, were uncomfortable; and 2d. I wanted to test their value by not using them. While wearing them I did not feel a single symptom of sick headache. When I put them off I continued reading and writing as when using them, but with inconvenience I had never felt before. I suffered so from the attack of sick headache caused by the disuse of my glasses I shall never repeat the folly in the future. I had a pair of spectacles made, and now wear them all the time, and feel that I am safe from attacks relief from which I had expected nothing but age to give me.

In my own case sick headache had its cause in hypermetropia and astigmatism, and its cure was glasses.

I have had but one other case by which I have been able to still further demonstrate the correctness of my views. That case is a married lady, twenty-six years of age, a sister of mine. She was not so great a sufferer as either our mother or myself, but her cure has been as perfect and remarkable as my own. She was hypermetropic in one eye, and both hypermetropic and astigmatic in the other eye. The proper glass for each eye was given her, and now her sick headache is a thing of the past.

Since writing the above, my preceptor, Dr. Crook, of Henderson, this State, came into my office, to whom I made known my views. He is one of the many sufferers from sick headache, and like all others, believed the predisposing cause some stomachal trouble. He said, "can hypermetropia be the cause in my case? I always thought I had perfect sight." I told him that, according to my theory, it was, and that I had no doubt but it was. I asked him to let me test his vision and see. We selected his right eye, that being the one he suffers more from. Before instilling the solution of atropia I determined, by means of a convex glass, that he was hypermetropic, though without the glass his vision was equal to $\frac{20}{xx}$, his hypermetropia being latent. Atropia converted his latent into a manifest hypermetropia, and now, instead of his vision being $\frac{20}{xx}$, it was not more than a perfect $\frac{20}{0}$. A spherical convex glass of twenty-four inches focal distance gave him perfect vision. He was surprised, but now believes, with me, that properly fitted glasses for both eyes will do for him what my glasses have done for me, cure his sick headache. This case is another link in the chain of evidence that will, when complete, convince all of the correctness of my views herein set forth.

This is the first of my making public my discovery, and, lest I might be too severely attacked by some one, I will produce some arguments to support my views.

Flint, in his work on Practice, says that the affection involves a constitutional predisposition, acting with which, various exciting causes may bring on an attack. He could not name the predisposing cause. He supposed that some toxical agent must exist in the blood, but says its source and nature are unknown. I claim that the predisposing cause is hypermetropia and astigmatism, either alone or combined, and that chief among the exciting causes is work requiring the convergence of the axes of the eyes with the attending action of the ciliary muscle, such work as reading, writing, sewing, crocheting, etc., which work, in an emmetropic eye, would produce no bad symptoms.

With Flint I agree that the predisposition, in most persons, ceases at the age of 50 or 60 years. While he gives no reason, to me there is a satisfactory reason, and it is the only one ever offered, so far as I know, it always having been considered an unexplainable fact. My explanation is that it is about the age of 50 or 60 years, in most persons who are hypermetropic, whether they suffer from sick headache or not, when a latent hypermetropia is converted into a manifest hypermetropia, the ciliary muscle that has had to work so hard during so many years being worn out and ceasing its labors. Long before this has presbyopia (old sight) come on, requiring the person to use spectacles when doing near work, as reading, etc. By this time the hypermetropia is manifest, while during the period through which he suffered, perhaps 30 years or more, the hypermetropia was latent, rendered so by the action of the ciliary muscle.

The periodicity of the attacks may be explained by the eye's being able to bear for a time the excessive work which it is made to do, when at length its distress is made known by an explosive attack of sick headache, the eye and head aching indescribably and the stomach, through sympathy, so desperately nauseated as to unload itself of its contents. Even before the attack comes on the stomach performs its functions sluggishly, through sympathy for the overworked eye. Cannot the stomach sympathize with the eye if the eye and head can sympathize with the stomach?

To Flint's next statement I am not ready to give my assent, viz., that the predisposition exists more frequently in females than in males. We may take one hundred females and one hundred males out of the same city, town or neighborhood, and I doubt if we find more hypermetropes (hypermetropia, according to my theory, being the predisposing cause) among the former than among the latter; but, at the same time, I believe that the number of females actually suffering from sick headache would be much greater than the number of males. Why? Perhaps seventy-five out of the one hundred females would have to employ many hours in the day in reading, sewing, crocheting, or some kind of work requiring near vision, with the necessary tension of the ciliary muscle, the one great exciting cause of sick headache; while not more than twenty-five of the one hundred men would be engaged in work requiring continuous near vision. Then, while I do not know that the pre-

disposing cause exists more frequently in females than in males, yet I believe that I am right in concluding that the former are more exposed than the latter to the one great exciting cause mentioned above.

The clinical history of sick headache given by Wood in his Practice, is unobjectionable. But when he says that the predisposition, for the most part, consists in debility of the stomach, and a peculiar state of the nervous system which renders the brain especially sensible to gastric irritation, I must dissent from, though I once embraced, the doctrine, and drugged myself accordingly. In most cases he thought the headache secondary to the stomach affection, the head sympathizing with the stomach; but says there is reason to believe that the reverse is sometimes the case, the head affection being primary, the stomach trouble secondary, the stomach in this case sympathizing with the head. Wood's views, as well as all others ever expressed, must be erroneous, if my doctrine is true.

Although sick headache is as common as it is dreadful, Bartholow and other writers on the Practice of Medicine have not said a word about it.

I will not attempt, in this communication, to explain the structure of the eye, to define hypermetropia and astigmatism, or to give the relationship existing between the eye and the stomach, so intimate that when the one is affected the other will sympathize, as in sick headache. Nor have I attempted to give a clinical history of the malady. In the REPORTER of May 6, 1882, you can read an admirably written clinical history by Dr. Smith, whose communication I read with interest. You will see from his communication, however, that we do not agree as to cause and treatment. If he will now send his male patient, aged 40 years, a history of whose case he gives in his communication, to an oculist, I promise him that the cause of the disease will be ascertained to be hypermetropia, either alone or combined with astigmatism, for which the positive cure will be glasses. Many others of his patients of whom he makes mention, if not all, doubtless have the same predisposing cause, and can be cured as easily.

I present the views embodied in this communication to the medical profession, asking that they be not condemned until proven erroneous. I have no doubt but that they will stand the test of investigation, and will ultimately be received as the true views relating to the cause and cure of sick headache.

I know that my theory, even if true, is liable to be brought into local disrepute by the correction of the defect of the eye being attempted by unskilled hands.

As a fitting close to this communication I would ask medical practitioners everywhere, if prepared to do so, to put every case of sick headache to the test, or if not prepared themselves for this kind of work, advise their patients to go to an oculist, that my theory may thereby be put to the test also. If my theory is erroneous, I want it to fall; if true, then millions who are now suffering may be permanently cured.

Many patients may appear to have perfect vision for distance, when it is only made so by continuous tension of the ciliary muscle. This tension can be overcome, and the muscle put at rest, by the use of atropia, when the true condition of refraction will be shown. The whole of the hypermetropia, whether latent or manifest, should be corrected, likewise whatever astigmatism may exist.

If this communication incites any one to investigate, that he may determine whether my theory is correct or erroneous, I would be glad to learn, through this journal or otherwise, the result of such investigation.

My theory is now before you. May it stand if true, may it fall if erroneous.

AN INSTRUMENT FOR THE REDUCTION OF FLEXIONS OF THE WOMB.

BY H. L. GETZ, M.D.,
Of Marshalltown, Ia.

About five years ago I devised, and have since used successfully, in a number of cases, the very simple and efficient instrument which will hereafter be described.

The objections to most, if not all, instruments used for the purpose above referred to are: First, when the flexion is severe it is impossible to introduce any of the instruments in general use without injury to the organ. Second, when introduced, if it is or can be done at all the point of the instrument encroaches severely upon the lining membrane of the womb, when an attempt is made to raise it into its natural position. Third, the instruments in use have not only the principal bearing at their point, but likewise upon a small point or surface; the same amount of force requiring to be applied for the reduction of the organ when the bearing is upon a small surface, as is required when it is made upon a larger one, the injury done to the part is apt to be correspondingly great as the bearing

surface is small. These defects are mainly overcome by this simple device:—

Plan of Instrument and its Application. — A common, flexible bougie (A), one quarter inch in diameter; A stylet (B), one-eighth inch in thickness, with plain handle; at opposite end, or rather about an inch and a half from end, the wire is somewhat reduced in thickness, and while firm enough to hold its shape, is tempered so as to have considerable spring, so that when straight, with a certain amount of force applied, it follows and springs around considerable of a curve. To facilitate the introduction and overcome the resistance necessarily encountered by the blunt point of wire coming in contact with the inner surface of the bougie, as the former is being pushed into the latter, a revolving disc (C), about one-eighth of an inch in diameter, is set in the end.

The best plan of application is to introduce the largest size flexible catheter or bougie which the canal will admit: with a very little skill these flexible catheters or bougies can be easily introduced into the womb, whatever may be the degree of flexion; now let it remain for a few minutes, and remove; introduce a next size larger, and so on, until you have reached say one-quarter inch in diameter; now you are ready to begin the replacement; the delicate mucous membrane is now protected by the bougie; now introduce within the bougie your stylet, being careful to guard it (should the flexion be acute and considerable force necessary to raise the womb), to prevent its breaking through the bougie and injuring the womb; after having reduced the flexion, the catheter with the stylet within it may be removed. The after treatment may be such as will keep the womb in position. I am in the habit of using a hard-rubber intra-uterine pessary, cutting off the top so that the point will not bear against the mucous surface within the upper part of the womb, and also that any secretions may escape through the opening in top of pessary as well as at its side. I think most trouble which is experienced by the use of intra-uterine pessaries arises from their being too long; the inverted cup, or whatever it may be, is held by the vagina closely against the external os, and the point of the instrument pressed firmly against the inside, at top of womb, soon to irritate and do harm. Mr. Wm. Snowden, of No. 7 South Eleventh street, Philadelphia, has permission to manufacture, and will be pleased to fill orders for any who will try this simple device and test its merits.

REMOVAL OF A TUBERCULOUS TESTICLE.

BY H. G. WELCH, M.D.,
Of Defiance, Ohio.

Patient, Jno. M., age 30. About seven or eight years ago the patient noticed that his right testicle was enlarged, but gave him no pain. It enlarged gradually, and he could feel lumps (to use his own expression) in the body of the gland. For quite a while previous to the suppuration he could feel a lump about the size of a large hickory nut in the testicle. The natural sensation of the gland was diminished, though not entirely lost. It only gave him pain by rather rough manipulation and by its dragging on the cord. To relieve the latter he wore a suspensory bag most of the time for several years. I believe this was the only thing done for the relief of the trouble, except his own treatment of the sore with salves, after it broke down and began to discharge pus.

Patient had scrofula in his youth and at times after he had reached adult life. His grandfather on his father's side died of pulmonary consumption, and also a sister died with the same trouble a little over a year ago. He seemed to have a strong constitution and enjoyed good health most of the time.

Four or five weeks before the operation the tumor broke down and began the discharge of a thin, watery pus, exposing a semi-solid, cheesy mass, which formed a partial or small hernia.

October 26th, 1881. Assisted by Dr. Harris, I performed the operation in the following manner:—

An incision from within one-half inch of and on a level with the penis, was made along the median line to the bottom of the scrotum. Another on the right side of the testis was made, including a portion of the scrotum, elliptical in shape (after contraction), one inch in width by two in length. The testicle was then exposed, but was so adherent that it had to be dissected out. The arteries of the scrotum were secured and tied or twisted as fast as cut. When the testicle was dissected loose two strong silk ligatures were placed around the cord, about three-

fourths of an inch from it, and tightly tied, and the cord then cut off half an inch below the ligature. No hemorrhage followed. The edges of the scrotum were then brought together by three sutures. The ligatures applied to the cord were left long, and protruded through the opening left at the bottom of the scrotum, and acted as drainage. The patient was then placed in bed, one-third grain of morphia given, and the wound dressed with carbolized water, which was the principal dressing during treatment. Had some trouble first night to pass his urine; after first night no trouble in that line. Slept well nearly every night. Had frequent desire for coition. (And I have my doubts whether he kept from it more than the first four or five days, although strictly enjoined to the contrary). On the night of the 30th, four days after operation, there was a profuse hemorrhage from a small artery, which escaped and ceased to bleed during operation. It caused some alarm, both to patient and myself, as I was hastily called and supposed it to be the arteries of the cord. It ceased, however, without interference, and subsequently bled a little, two or three times.

Mr. Erichsen advises that the cord be enclosed, in all cases, in mass, with a strong whipcord ligature, and left to slough off. Bryant also recommends the same procedure, and says, "when tightly tied there will be no pain from cord."

Frank H. Hamilton prefers to transfix the cord with a needle armed with a strong ligature, by which the cord may be held while the vessels are secured and made safe, and then may be left in place for four or five days, as a safety guard, by which, in case of secondary hemorrhage, the cord may be pulled down and the arteries again tied. He further says that in the only case in which he tied the cord in mass the patient suffered great and unnecessary pain.

In this case Mr. Erichsen's plan was followed, and found to be efficient, and gave the patient no pain, whatever. The cord sloughed off and came away on the fourteenth day. The patient was discharged on the seventeenth day, nearly well. Forty days after the operation the patient was shot through the heart and instantly killed. At the autopsy the wound was found firmly and nicely healed.

—Horace Greeley once emphasized the value of a vegetable diet by the remark that after Nebuchadnezzar had been turned out to grass it was never recorded of him that he suffered from indigestion.

Hospital Reports.

THE AMERICAN HOSPITAL FOR SKIN DISEASES, PHILADELPHIA.

CLINIC OF JOHN V. SHOEMAKER, A.M., M.D.

Reported by Edwin Rosenthal, M.D., Ph. G., Assistant Physician.

A Case of Pustular Syphiloderma Simulating Smallpox—With its Treatment.

Gentlemen:—To-day I bring to your notice a case which, for its clinical significance, I deem of great importance, inasmuch as it has caused quite a number of physicians to fall into a serious error, which I am happy to say has not ended so unfortunately as it might have done. The following is the exact history which I gleaned from the patient I now exhibit to you:—

His name is John W., a native of Scotland, and he is 20 years of age. His occupation is that of a waiter upon one of the ocean steamships plying between this port and Savannah, Ga. Two weeks ago he noticed an eruption appear on the chest, causing him but little uneasiness; this spread very rapidly, and he sought the advice of a physician in Savannah, Ga., who said his blood was out of order, probably from his mode of living; he prescribed some pills, and requested him to abstain as much as possible from the delicacies of the table. These pills had no effect upon the eruption; in fact, he says, they increased the breaking out until it had spread all over his body. His appearance in the cabin of the ship was such that he was excluded therefrom and placed by himself in another portion of the ship. The captain and the crew looked with some suspicion on his disease, and as far as practicable isolated him; and upon arriving in port (this city) sent him immediately to the Custom House, from which place he was directed to one of the large hospitals; (previous to his going to the hospital he was brought to a physician who diagnosed the case as smallpox and directed him to the smallpox hospital); the assistants there said he had smallpox and directed him to the office of the Board of Health. At the office of the Board of Health he was examined, and as there seemed to be some misunderstanding in regard to the diagnosis, the health officer sent him to me, with the request that we should examine him, and decide upon his disease, and if not contagious, take charge of him until he is cured.

On questioning him I elicited the facts as above stated, with the following additions: He had had intercourse about eight weeks ago, in Savannah, Ga.; he had never noticed any sore upon his penis; and is perfectly unable to say how he acquired the disease.

We will now have him undressed, and I shall examine him before you. You see he is covered all over with a pustular eruption, very much resembling the appearance of smallpox—particularly on the face and arms. Opposed to this eruption being smallpox, we have, first, the history: occurring on the trunk, and then spreading to other parts of the body, while in smallpox it first appears on lips, palate and forehead. Secondly, we have no constitutional disturbance—the pain in

the back, calf of the legs, etc.; and then the appearance of the eruption: the pustules here are small and pointed, while in smallpox the condition is very different; the eruption, appearing first papular, after about a day becomes vesicular, then pustular, and on the eighth day of the eruption the pustules mature and become umbilicated; none of these changes have we here; and on the skin at the gluteal region you can see distinctly the coppery hue of the fading pustule. In the groin I can also feel the lymphatic glands enlarged, and in drawing back the foreskin I show you the scar of the chancre. This is, therefore, beyond all doubt, a very bad case of pustular syphilis. The patient, nevertheless, reiterates his statement that he had no knowledge of its presence. On the left arm you see a tattooed picture, and at first thought—not having examined the penis—I imagined this could have caused the disease. I have seen cases before result from tattooing the skin, and some years ago there were exhibited at the Philadelphia Hospital a number of patients suffering from different syphilitic affections resulting from being tattooed by the same man, who, on being caught and examined, showed every symptom of syphilitic impregnation, with mucous patches in the mouth, from which he had transmitted the syphilitic virus by holding the needles in his mouth when he went through the manipulations of tattooing the patients. Now, having arrived at the truthfulness and certainty of our diagnosis, I will call your attention to the method I shall pursue in the treatment of our patient.

Some years ago my attention was called to the "hypodermic injection of corrosive sublimate" in syphilitic disease, by Dr. Julius Kæmmerer of this city, who not only practiced the same with satisfactory results, but instructed his pupils, Doctors L. Wolff and Edwin Rosenthal, in its use. I have used this method of treatment in over one hundred and thirteen cases, within the last three years and a half, and can speak with some certainty of its results. I propose to use this treatment here, and shall use nothing else whatever, and you will, therefore, be able to watch from time to time the process of the cure, with me. I will now show you the method of making the injection, but before doing so, I will give you a few precautions, which I strongly advise you to follow. In the first place, see that your syringe is kept clean, and always use a glass one. Experience has taught me that they are superior to the metal or rubber syringes, for the following reasons: The metal syringe corrodes after using a few times, and becomes utterly unfit for use; and the rubber syringes are of too light material, they will very easily break. In the second place, look to your needles. See that they are well cleaned, free from rust, and of sufficient length. If they are dirty or rusty, they will act as an irritant, set up inflammation and cause abscesses. And if they are insufficient in length, they will not enter deeply enough, and instead of depositing the solution in the cellular tissue, where the absorbents can quickly act upon it, they will deposit it into a stratum of the skin where there are no absorbents, and thus again act as an irritant, set up inflammation, and cause abscesses. Again, in using needles, try to get one of gold, which, in my experiments, I have found the best, though those of steel will answer the purpose, if they be kept well cleaned and pointed. Also advise your patients to procure a syringe of their own, or if this be found impracticable get a needle for each; you will thereby lessen any chance for contagion. And also, when you are through with your needle, after an injection, see that it be well cleaned and oiled and run through it a bristle, well oiled. I have found that when you use a bristle, you keep the needle not only cleaner, but you lessen the chances of its rusting soon. A metallic wire run through the needle is one of the most certain causes of its early rust. If you follow out these precautions, you will be saved many annoying failures, and success will crown your efforts.

Now, in injecting the sublimate solution, I use a solution of the strength of one part of corrosive sublimate to one hundred parts of distilled water. In this proportion I find that I can more easily divide the dose I wish to give, as most of the hypodermic syringes are divided into tenths, and therefore a syringeful would very soon tell you how much corrosive sublimate you are using in the injection.

I generally make the injection either in the infra-scapular or sacral regions, because I have found these parts the least susceptible, and again they contain more cellular tissue than any other part of the body. Sometimes the injection is followed by a burning pain, which may be from the slightest annoyance to the most intense, varying with the susceptibility of the patient; it is often aggravated by the patient lying upon the spot of puncture. For the relief of this pain I tell the patient to rest quietly, and if it is not then relieved, I apply a lump of ice to the part; some use morphia in combination with the corrosive sublimate in the injection, for the relief of this pain. I have had unusual good results in my injections, as it was very rarely that intense pain followed the puncture.

Now, gentlemen, you will notice how I make the hypodermic injection; I seize a fold of the tissue in the infra-scapular region with the thumb and forefinger of my left hand, and push the needle of the syringe, held in my right hand, deep down into the cellular tissue, and I slowly press out the contents of the syringe; I then remove the syringe by a rotary motion, pressing back the tissue with my finger of the left hand and with the other fingers slowly distribute the solution into the surrounding tissue, by gently pressing and kneading about the point of injection. Before making the injection I see that all the air is forced out of the syringe, and I always oil the needle with pure olive oil before I push it through the tissues.

This will be the only treatment pursued here, and at my next clinic I will bring this patient again before you, and you will be surprised to see the change that will take place in the appearance of the eruption. You will see the pustules dry and gradually disappear, and in a few weeks we will discharge our patient cured. I will order my assistant to give him one injection of one-tenth of a grain of corrosive sublimate daily, and that he should increase it, mimim by minim, every day or every other day, as our judgment may di-

rect, till we have him under the influence of the drug, and then we will slowly decrease the dose until our patient is cured.

In speaking of the hypodermic method of treating syphilitic affections, I must say that I believe it to be the only rational method of eradicating this disease.

Why? I have treated patients by internal medications over and over again, with the most unsatisfactory results. In one case that I now recall, I have given grain after grain of calomel, corrosive sublimate, and the other salts of mercury, for nine months, until I was thoroughly disgusted with it; and then using hypodermic injections, I was soon able to discharge my patient cured. This method I have used in the most obstinate cases, and have yet to see a total failure. It begins its good action in a week or ten days, and as soon as this has been obtained the treatment progresses very quickly to a cure.

I now wish to rid your mind of an error in which we commonly believe: Some authors say that mercury acts internally by forming an "albuminate." I do not see how this can be possible, albumen is the antidote for corrosive sublimate, and if it should form an "albuminate of mercury," I cannot see what good it would do. When administering mercury internally it forms, I think, an "albuminous mixture" or solution, and the reason that we have such bad results from the use of this drug is this: The mercury may form an insoluble albuminous mixture, which will not remain long enough in the body to become absorbed, but passes out with the stools. This can never take place by the hypodermic method, for it becomes, shortly after depositing it in the tissues, absorbed, and begins at once its good action.

Syphilitic Periostitis.

The next case I show you is William O., age 35 years. He is suffering from syphilitic periostitis of the metacarpal and phalangeal bones of the left hand. In him I wish to demonstrate to you the process of cure as it is taking place, by the use of hypodermic injections. In the first case I showed you the beginning of the treatment; in this case I show you the process of cure which is near the end. Now, it will be of great interest to you to know the history of this case, with the history of the treatment; and I brought him before you for this purpose, and also to show you the extent of the disease. The difficulty in the hand began last July; previous to this he had evidences of syphilitic sores on all parts of the body, and presented evidences of scars where the syphilitic sores were. After being under the treatment of several physicians he applied at the Hospital for relief. At this time I found the hand and fingers enormously swollen, covered with tubercles, some in the process of formation and others in the process of ulceration, and, upon examination, I found gummy deposits were formed along the course of the metacarpal and phalangeal bones. He had received treatment of all sorts and varieties, and when he came to me, with the parts so enormously swollen, I immediately plunged a bistoury into the inflamed and swollen mass, down to the bone, to relieve tension, deplete the parts, and give vent to the accumulated pus. The operation gave him immediate but only temporary relief, and he soon returned to me, and I, from time to time, made use of the bistoury, without any decided and permanent benefit, until at last I began the use of the hypodermic injections, with the result you see here: The inflammation has subsided, the infiltration has become absorbed, and here you see him come back almost cured.

In conclusion, I would advise you to use this method of treatment in your practice, for the following reasons:—

First. For the quickness of its action, as you will see by the first case I showed you; for what treatment can act as quickly as this method.

Second. For the accuracy and precision of its dose, and—

Third. Which is important to the physician, the simplicity and "easiness" of its application. Here one may in a very few moments measure out and give the desired dose, and the method is so simple that it could easily be learned by the most ignorant; besides, any uncomplicated system of medication is sure to be acceptable to the physician of average intelligence.

I again recall your attention to the precautions I have advised, and tell you that much of your success will depend upon them. Much of the ill success recorded by European and other observers depends upon a neglect of the commonest rules to be followed in any hypodermic injection. Some of them use the solution in a too concentrated form; others, again, use it in a too dilute form, hence they must inject twice and thrice the quantity at one time, to get the result, and thus set up inflammation and its results. Others, again, do not give the remedy time to act; while the majority of physicians do not care to take the trouble of giving a hypodermic injection every day.

Here, then, gentlemen, I have demonstrated to you one of the best methods, I think, there is for the treatment of all syphilitic affections, and in concluding, lay particular stress on one subject I very near forgot mentioning to you: Do not forget the susceptibility of some individuals to the use of mercurials; if you should meet such a patient, the only precaution you need is to begin with the smallest doses and slowly increase.

Aloetic Pills.

M. Audhoui, in *Le Médecin Praticien*, considering that the preparations containing aloes in general use are of too irritating a nature, recommends the following pill mass, which he constantly uses:—

℞.	Aloes pulv.,	℥ ss
	Potass. bitart. pulv.,	℥ ss
	Sapo. amygdal.,	℥ j
	Acaciæ gum pulv.,	℥ ss
	Syr. simplic.,	q.s.

Mix carefully the powders and soap, add the sugar and divide into 100 pills.

M. Audhoui prescribes one, two or more of these pills, according to the condition of the digestive organs, after meals.

Editorial Department.

Periscope.

Multiple Sarcomata.

In the *Medical Times and Gazette*, Dr. A. R. Anderson records the following unusual case:—

J. B., aged forty-three, was admitted into the hospital on May 3d, 1880. He said that up to four months previously he had been in good health, and at that time he wrenched his shoulder at work, and soon after noticed a swelling on it, which was shortly followed by like swellings on the chest and head, the rapid increase of which, both in number and size, caused him to apply for admission into the hospital.

On examination, he was found to have eight tumors—three of which were situated on the front of the chest and five on the head. Those on the chest were placed one on either clavicle, the third over the upper part of the sternum. The one on the right clavicle was the first to appear; it lay over the inner third of the bone, and had existed for four months. It increased rapidly in size, and had at this time attained the dimensions of an orange, measuring three inches and a half along its greatest semi-circumference, and two inches and a quarter along its shortest. It was rounded, hard, painless when touched, and firmly connected with the subjacent bone. Over the sternal end of the left clavicle was a much smaller swelling, having the same characters, and measuring one inch by one inch. The third, on the sternum, was irregular in shape and flattened; it measured two inches by one inch.

Of those on the head, the largest was seated in the centre of the forehead, and was rounded, and quite soft and semi-fluctuating, especially in the centre, differing markedly in this respect from those on the thorax. Close to the lateral boundary of the forehead another tumor existed on either side. These were not more than a quarter the size of the previous one, but possessed the same general characters. The fourth was over the left parietal bone, and was quite small. The fifth and last of these growths lay near the apex of the lambdoidal suture, and had a somewhat remarkable history. Five weeks before his admission, it was stated to have been the size of a pigeon's egg; since then it had diminished much in size, again increased, and again disappeared. Its site was, at the time of his admission, only marked by a soft, boggy patch, about one inch and a quarter in diameter and very slightly elevated above the surrounding integument. The edges of the patch were firmer, and gave the sensation of a ring. The subjacent bone felt firm and hard.

With regard to his general condition, he was fairly well developed, and had been muscular, but had lost flesh latterly. He ate and slept well, being free from pain. There was nothing in the family history bearing on the nature of his complaint. Was ordered to take a mixture containing ten-grain doses of iodide and bromide of potassium three times a day.

On June 1st, while helping another patient into bed, and without making any undue muscular effort, his right humerus broke, with a loud snap. A transverse fracture was found in the lower third of the bone, and the limb was put up on an angular splint. There had been no improvement up to this date in his condition; indeed, the growths had increased in size, and another had appeared over the left mastoid process. There was, however, no sign of any tumor at the seat of fracture.

June 19th. Fracture of the left humerus was caused to-day in the lower third of the bone, by the very slight muscular effort employed in raising the corresponding hand to his head. He had been warned to be cautious in his movements, and had lifted his arm slowly and deliberately. There was no appearance of a new growth in this situation; but the left eye had become prominent and vision much impaired, clearly indicating one within the orbit.

He was now in a sad state of helplessness, and decided shortly to go home. He was discharged on June 26th, and subsequently attended by Mr. Joseph Thompson, through whose courtesy I was enabled to watch the case to its termination.

After leaving the hospital the swellings increased enormously in size, and fresh ones appeared; at the same time he grew rapidly weaker, and shortly before death his condition was as follows:—

On the *head*, the tumor in the centre of the forehead was as large as a saucer, flattened on its surface, and raised four inches from the surrounding skin; the integument over it was thickened, almost horny, and pigmented, being of a dark brown color; large veins were to be seen traversing it. The forehead tumors on either side of this one were somewhat larger than when he went home, but had not increased in size so rapidly. Behind the left ear was a swelling as large as a hen's egg, and another of the same dimensions existed now over the posterior fontanelle; a third, rather smaller than these, was situated just above and behind the right ear. The left eyeball was protruded on to the cheek, and vision entirely lost. A red, sprouting, granulating mass projected here.

The tumors on the head had these characters: They were not so distinctly circumscribed as those on the body; they were softer to the touch, semi-fluctuating in some parts, and had surfaces which were fairly smooth or only slightly tuberous; they were firmly fixed on subjacent parts, and could be handled without pain; neither the skin covering them, nor the neighboring lymphatic glands, were involved.

On the front of the *chest*, five of these growths were situated. The largest lay partly in front of and partly below the right clavicle, and was the size of a cocoanut; a second was situated over the inner third of the left clavicle, a third over the centre of the upper part of the sternum, a fourth also in the middle line below this. All these were about half the size of the first-men-

tioned, and the fifth was larger; it occupied a spot immediately below the left nipple. They were all firm and hard, with distinctly circumscribed outlines and nodular surfaces, painless when touched, and firmly fixed. There were no glandular enlargements or skin implication. On the right acromion was a single tumor, and a corresponding one lay on the left, with a third just below it, connected with the humerus—all the size of eggs, hard, nodular and immovable. There was not the least attempt at union in the fracture, either of the right humerus or of the left, and in this situation there existed now. on each side, a swelling as large as an orange, firm, fixed, and evidently growing from the interior of the bone; and lastly, in the middle of the extensor surface of each forearm was another tumor, having the same characters as the above and being of almost the same dimensions.

He was in a state of extreme emaciation, and on the sacrum was a bed-sore. He complained much of weariness and general soreness, he said, from lying, and required to be constantly moved. Pains in both knees were causing him much trouble, but there were no signs of any tumors there. Percussion over the thorax and abdomen did not detect any abnormal dullness, and there was no enlargement of the abdominal viscera. He gradually sank, and died on the morning of Christmas day, 1880. His intellectual faculties remained clear to the end.

Rheumatic Diathesis and the Initial Lesion of Syphilis.

Dr. C. B. Lockwood thus writes, in the *British Medical Journal*:—

Most observers are agreed that the course of syphilis may be greatly modified by the diathesis of the patient. Reference to the writings of authorities on syphilis, and to their discussion at the International Medical Congress, shows that their observations are extended chiefly to the later stages. I am not aware that any one has recorded observations showing that the rheumatic diathesis can modify the initial lesion. Primary syphilitic sores come under notice, which at first present ordinary characters. They afterwards become "inflamed and phagedænic" (Hill and Cooper, *Manual of Venereal Diseases*, London, 1881, p. 466), and may cause considerable destruction of tissue. Many attempts have been made to explain this occurrence (*Ibid.*, p. 468); debility, patients' habits, position of the sore, and peculiarities of the virus, have all been adduced. In the cases mentioned below, all of these can be eliminated, except the last. If the infecting virus in such cases as these be peculiar it must expend its peculiarities upon the sore, for the other manifestations are not unusual. Moreover, these sores do not cause similar ones when inoculated. It therefore remains to explain what Messrs. Hill and Cooper state, and what personal observation has frequently confirmed, why "patients are met with who, but for the rapidly necrosing chancre itself, present every sign of good health" (*Ibid.*, p. 469). The following cases may suggest a cause. They are not numerous, but seem to be more than coincidences:—

A patient, aged 26, came under my care in September, 1879. He had what appeared to be an excoriation near the frænum. Ordinary applications had no effect upon it. By the end of September the sore was larger and considerably indurated; not inflamed or particularly ulcerated. The inguinal glands were indurated. About the beginning of October the character of the sore changed. It became inflamed, very painful, and excavated. There was a profuse, thin, and slightly sanguineous discharge. Small sloughs occasionally separated, and the ulceration extended until about a quarter of the glans penis was destroyed. The appearance of the disease at this time was quite characteristic. The sore was acutely inflamed and phagedænic. In November there was acute inflammation of the dorsal lymphatics of the penis, with roseola over the chest and belly. The treatment adopted locally, during the whole course of the disease, was the use of warm baths and the application of iodoform. Constitutionally, two and a half grains of blue pill were administered night and morning. The effect of mercury was to cause the sore to spread, and increase the pain. Iodide of potassium with tartrate of iron was given, in increasing doses. Opium was administered, to relieve the pain. Improvement was rapid and continuous, and the sore healed. Afterwards, the patient had a slight tubercular syphilide and ulcerated throat. These were relieved by increased doses of iodide of potassium (30 grains) three times a day, and calomel vapor baths (15 grains) every other night. About February, 1880, he discontinued the iodide of potassium, and took half a grain of green iodide of mercury each night, for a few months. He is at present free from symptoms.

There did not appear to be anything to account for the course of this patient's disease. He had not taken mercury before the inflammation began. He appeared strong and healthy. His circumstances were comfortable, and his life regular. The following case seemed to throw some light upon it. About December, 1880, W. H., aged 25, a bookbinder, came under observation in St. Bartholomew's Hospital. He had an inflamed and phagedænic chancre, which resembled, in all its characters, that of the first patient. He also had lymphatic engorgement and roseola. His throat was ulcerated. Mercury increased the ulceration, which had destroyed about a quarter of the glans penis. Iodoform was therefore applied to the sore, and iodide of potassium and tartrate of iron were administered internally. By the end of January, 1881, the sore was healed, the patient left the hospital, and has not been seen since. There was nothing about this patient which would account for the inflammation and phagedæna. He, like the other, appeared strong and healthy. However, I remember that the first patient was very rheumatic. He had suffered from rheumatic fever twice, and from one or two slighter attacks. He had had endocarditis and iritis. Upon inquiry it was found that W. H. had been laid up in the London Hospital seven years before, suffering from rheumatic fever. He said his heart had been affected, but no murmur could be detected. There was no family history of rheumatism.

Two other cases, in which hard sores became inflamed and phagedænic, have come under notice. In one there was a clear history of previous rheumatism. The other had never had rheumatism; but his father had had rheumatic fever, and his mother suffered from chronic rheumatism. This case is progressing favorably, iodoform being applied to the sore, and $\frac{1}{3}\frac{1}{2}$ grain of bichloride of mercury given three times a day. It may be mentioned that he had inflammation of the dorsal lymphatics of the penis. This occurring in two cases denotes the intensity of the inflammation. Mr. Hutchinson, in the *Medical Times and Gazette* (quoted by Hill and Cooper, page 469), has attempted to account for the origin of phagedæna. "He considers the patient's temperament. Certain persons have special proclivities to acute inflammation; and such a patient, if attacked by a chancre, would be more likely to have a phagedænic form of chancre." Bearing this in mind, and remembering how prone rheumatic patients are to inflammations, it might be anticipated that in them chancres would become inflamed. Four cases form insufficient materials from which to draw sound conclusions. But these are suggestive, and serve to bear out theoretical considerations.

As regards the treatment of these cases, in two mercury certainly did harm. The third was not under observation a sufficient time to form any conclusion. The last is improving under very small doses of a mild preparation. He had never had rheumatism himself, and his predisposition was probably least. Experience teaches not only that phagedæna is seldom benefited by mercury, but also that iodide of potassium is good for rheumatism. It can, therefore, be understood why these cases were so amenable to treatment by the latter. Therefore, in cases of syphilis in which the initial lesion is inflamed and phagedænic, and in which there is a history of rheumatism, it is probable that iodides will be of service at an earlier stage than usual. Mercury should be administered with the greatest caution, if at all.

Hyperpyrexia in Acute Rheumatism.

A Committee of the Clinical Society to whom the question of hyperpyrexia in acute rheumatism had been referred made their report to the Society, May 26th. From the *Medical Times and Gazette* we glean the following conclusions that were arrived at:—

1. That cases of hyperpyrexia in acute rheumatism appear to prevail at certain periods, having in the last decade been remarkably numerous in the years 1873-76, whereas latterly they appear to have been much less frequent. That such excess corresponds in a certain degree, but not in actual proportion, to a similar excessive prevalence in acute rheumatism generally. That the largest number of cases of hyperpyrexia arose in the spring and summer months, whereas rheumatism is relatively more common in the autumn and winter.

2. That while very little difference obtains between the two sexes in regard to proclivity to rheumatism, the proportion of males to females exhibiting hyperpyrexial manifestations is 1.8 to 1, but that as to age no such marked difference exists; nor as to occupation.

3. That the subjects of hyperpyrexia show no undue rheumatic tendency as regards family predisposition.

4. That cases of hyperpyrexia preponderate in first attacks of rheumatic fever.

5. That hyperpyrexia is not necessarily accompanied by any visceral complications, but may itself be fatal. The complications with which it is most frequently associated are pericarditis and pneumonia.

6. That the mortality of these cases is very considerable, hyperpyrexia being one of the chief causes of death in acute rheumatism.

7. That although present in a certain number of cases, and then of much value, from their prodromal significance, neither the fact of the abrupt disappearance of articular affection, nor the similarly abrupt cessation of sweating, is an invariable antecedent of the hyperpyrexial outburst.

8. That the supervention of delirium or other symptom of nervous disturbance is very frequent, either antecedent to or simultaneous with the hyperpyrexia.

9. That there is considerable variability in the date of the occurrence and in the duration of the hyperpyrexial condition, ranging, according to our observations, at least, from the fourth to the thirtieth day.

10. That when death results it has occurred mostly in the second and third weeks of the rheumatic attack.

11. That the post-mortem examinations in a certain proportion elicited no distinct visceral lesions, and that, when present, the lesions are not necessarily extensive.

12. That the prompt and early application of cold to the surface is a most valuable mode of treatment of hyperpyrexia. That the chances of its efficacy are greater the earlier it is had recourse to. That the temperature cannot safely be allowed to rise above 105°. That failing, the most certain measure—viz., the cold bath—cold, may be applied in various other ways; by the application of ice, by cold affusions, ice-bags, wet sheets, and iced injections.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. W. O. Roberts, of Louisville, in a report read before the Kentucky State Medical Society, gives a useful review of the progress of surgery in 1881.

——That fortunately rare disease, Cancer of the Lung, is the subject of a reprint by Dr. G. W. H. Kemper, of Muncie, Indiana. It is almost needless to say he regards such cases as absolutely hopeless. The only palliation is opium.

——Now that the manœuvre of lithotrity is generally approved of, the observations upon it by

Dr. Reliquet deserve close reading. The little pamphlet published by A. Delahaye, Place de l'Ecole de Médecine, Paris, is entitled "La Lithotrite doit être faite sans Traumatisme," and the title expresses the whole of the author's aim. The argument is well put and forcible.

——An able summary about asylums and their reports is given in a reprint by Dr. C. L. Dana, of New York City. He estimates that the number of insane in the United States in 1880 was about 90,000; of these, in asylums about 40,000. There are more insane in New England than elsewhere, but the rate is decreasing there. The annual cost per patient is from $200 to $250. He closes with some just criticisms on the reports, which we quote:—

What, as a medical man, one would criticise most, is the absence of the scientific spirit in the gentlemen who are the authors. To run an asylum on an economic basis is something, but it is not all. There is a science known as psychiatry. We have in this country three hundred gentlemen who have almost exclusive opportunities of studying it upon their forty thousand patients. But they, as a rule, contribute nothing of real scientific value to our literature. Such a thing as this is unparalleled in any other civilized country, or in any other medical specialty.

——A reprint by Dr. C. T. Bull, of New York, treats of syphilitic diseases of the lachrymal apparatus. He divides them into lesions of the lachrymal gland, of the caruncles and of the passages. When the inflammatory action is severe, he uses mercurial treatment, and remarks:—

"A very excellent method of administering mercury in these cases is to use two drachms of mercurial ointment, by inunction, upon the inner aspect of the arm or side of the chest, and at the same time give the mild chloride internally, in doses of grain one-sixth to one-fourth every hour or two, carefully watching for the first symptoms of the action of the drug. In many cases a beneficial effect upon the lesion will be observed on the third or fourth day, and then the mercury may be either entirely discontinued, or given in smaller doses at longer intervals. In many of these cases complete recovery follows such a course of treatment; all signs of inflammation and obstruction in the duct disappear, and the patency of the duct is restored without any incision or probing.

BOOK NOTICES.

Transactions of the American Gynecologial Society. Vol. VI. For the year 1881. Philadelphia: H. C. Lea's Son & Co. 1882.

This handsome volume appears with all the æsthetic elements of toned paper, antique type and gilt edge, which characterized its predecessors. Gynecologists have so much to do with the fair sex that they have contracted its love of finery, we suppose. Many solid articles will be found in its 542 pages, and the indexes of the literature relating to gynecology and obstetrics, added at the close, are especially useful. The writers are numerous, and as we cannot pretend to do justice to all, we shall mention only a few, not meaning that they are, for that reason, the most important.

Dr. Jenks' article on the practice of gynecology in ancient times is the sort of contributions we like to see, as there is entirely too little attention paid in this country to medical history. He condenses a great deal of interest in a few pages.

Dr. Bozeman's article on "Genital Renovation" has in it much of value, but we must condemn the appearance of pedantry in his nomenclature. Is there any real advantage in writing language like this: "Genital renovation, or genital anakainosis, as opposed to genital kleisis, particularly by kolpostenotomy and kolpoecpetasis in urinary and fecal fistules, without interference with the functions, is the title, etc.?" With an English-Greek lexicon at hand, it is easy to fill a page with neologisms, but this mania, now so prevalent with certain specialists, does not advance science.

The subject of "Bursting Cysts of the Abdominal Cavity" is discussed with great clearness and with some very striking cases, by Dr. Goodell.

The proper treatment of that most obstinate complaint, lupus of the vulva, is clearly set forth by Dr. I. E. Taylor.

Several interesting obstetrical points were also touched on in the papers.

Practical Medical Anatomy. By Ambrose L. Ranney, A.M., M.D., etc. Wm. Wood & Co. 1882.

This is a new arrangement of anatomy, more on the plan of Hyrtl's work than any other we recall. It is aimed especially to serve the purpose of the practitioner, and connect anatomical with medical facts. The project is a good one, and Dr. Ranney has carried it out well.

We have noted occasionally loose statements, as that (p. 15), owing to an imperfect development of the frontal sinuses in the Australians, a want of resonance to the voice is produced! The authority for this dates from 1700 (!) and it is an absurd fiction, their class of languages being vocalic and resonant (Müller *Grundriss der Sprachwissenschaft*, *Bd.* II, § 1).

The illustrations and paper cannot be mentioned with praise. The volume is one of Wood's Library of Standard Medical Authors.

THE

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THE LAST SCENE OF A SAD HISTORY.

The imperfect reports of the examination of Guiteau's brain hurried into some of our contemporaries were sufficient, however, to indicate that no marked anomaly, either in symmetry or normal character of brain substance, was found. This is borne out by the more ample details now published.

Of course, this is far from conclusive that there was no mental aberration; it may be said neither to tell for nor against that hypothesis; but the confident assertion of some of the experts, that there was marked asymmetry of the head, that "any one could see that Guiteau was a lunatic," etc., receive a well-merited rebuke from this investigation.

It is to be regretted that, like so much in connection with this unfortunate case, here too an opportunity for a professional wrangle offered itself, and was at once seized upon. Not only this, but the public all over the land was made acquainted with matters relating to the quarrel which should have been regarded as belonging to the personal relations of those concerned.

Must this washing of professional dirty linen in public continue, without an effort to stop it? There is a legitimate difference of opinion on many—shall we say on most?—professional questions, and for the one side or the other to pour its grievances into the long and ready ear of the first newspaper reporter who presents himself, is very discreditable.

We extract the following from the official report, as of most interest in the case:—

Head.—The first thing noticed was a scar on the scalp, an inch long, situated longitudinally, just above and behind the left temple, but there was no corresponding mark upon the skull. The right parietal bone was slightly flattened in its upper and anterior part, covering about two inches square and terminated at the coronal suture. This flattening was confined to the outer plate, and was at the expense of the diploic structure, as there was no bulging of the inner table, immediately beneath, that could be discerned. It was regarded of such a trivial nature as to make it unnecessary to take accurate measurement by transverse sections of the skull at this point, or to remove the skull to the museum for more minute examination, and it was buried with the remains.

There were no other points of asymmetry noticeable. The cranial sutures were distinct. There was no visible trace of a frontal suture, the two halves of the frontal bone being thoroughly welded. On the inner surface of the skull the usual bony prominences were well marked, also the pacchionian depressions. No abnormalities were discovered. The thickness of the skull was not measured; but, to the naked eye, it was normal. The diameters and cubic contents of the skull were not taken, nor the relative size of the fossæ.

Brain Membranes.—The dura mater was quite strongly adherent in places to the inner surface of the skull, viz., near the trunks of the middle meningeal arteries; also near the longitudinal sinus in front, but could be stripped cleanly from the bone at all these points of attachment, as there was no roughening of the skull here or elsewhere. There was no exudation on any part of the inner surface of the dura mater. Quite a number of pacchionian granulations were distributed along the course of the longitudinal sinus. The cerebral sinuses contained but little if any blood. The dura mater, pia mater and brain were adherent to each other on both sides along a limited portion of the longitudinal fissure adjacent to the pacchionian granulations.

Arachnoid.—There were very well marked milky opacities of the arachnoid, but no apparent thickening, extending over the upper portion of the convex surface of the hemispheres only; as elsewhere, the membrane was perfectly normal. These opacities were confined to the upper portion of the sulci in this vicinity exclusively, and were such as are often found without previous history of disease. The sub-arachnoid space contained very little fluid. Pia mater was easily

stripped from all parts of the brain. The blood vessels of the membranes and brain were empty, and the general appearance of the brain anæmic or bloodless. Sufficient examination was made of the large blood vessels of the brain to determine that they were in a healthy condition.

Brain.—The brain entire, with a portion of dura mater attached, weighed 49½ ounces, about the average weight for an adult male. The consistence of the brain was normal; its specific gravity and measurements of its chords and arcs could not be obtained, owing to lack of facilities. There was no apparent asymmetry of the two hemispheres. As regards contour and shape, exact studies were not made, and the comparative weights of the different parts were not obtained; cerebellum was well covered; the occipital lobes were not noticeably blunt or sharp.

There was an obvious want of precision in making the explorations, as is seen from the above. The blame for this, of course, each party wants to throw on the other. It is one of those disputes in which the unprejudiced observer will divide the onus about equally.

So ends a history which has been throughout, in its medical and surgical relation, with regard both to the murderer and his victim, one to which the profession of the United States cannot "point with pride." It has been a series of blunders, misstatements, and quarrels, beginning with a flagrant violation of professional courtesy, and concluding with an effort to dodge the blame of a slovenly-conducted post-mortem.

CONFIDENTIAL COMMUNICATIONS TO PHYSICIANS.

The following words of advice have been rendered necessary because of the freedom, the unwarrantable license, with which many physicians are wont to discuss the secrets of the consultation room. Many conscientious men who would not disclose the confessions of patients to those outside the pale of the profession, yet hesitate not to detail names and cases to their professional brethren, who in turn relate them to others, until in many cases they reach the ears of friends or relatives of the patient, and his character is justly or unjustly, as the case may be, but none the less surely, injured. Patients rarely ask secrecy from their physicians, either because they do not think of it, or else they take it for granted. Still, the physician is none the less bound to secrecy; and the conscientious medical man will so consider it. The secrets told in the consultation room of the physician should be as sacredly guarded in the innermost recesses of his most secluded nature, as are the revelations made to the Roman Catholic priest in the confessional. If we but stop and reflect for a minute, all of us in active practice can recall many instances where, by a breach of this implied trust, the character of a man or woman could be utterly and completely ruined for life, while the whole foundation of the domestic happiness and prosperity of many families could be razed to the ground by but a few ill-timed and uncalled for words from the physician. The story is related, on most undoubted authority, of a murder that occurred some years ago in Ireland. The victim was the brother of a parish priest, and no trace of the murderer could be found. A year or so afterward a man well known to the priest revealed to him, in confession, that he had murdered his brother. He received absolution for his crime and went his way in peace. For fifteen years this man lived in close proximity to the brother of his victim, whom he met every few days, and not a breath of suspicion did the priest utter against him, so sacred did he hold the revelations of the confessional. Finally, after this long period, one night the murderer was sent to summon the priest to the deathbed of one of his family who lived a mile or two from the village. While walking along the country road, they came to a lonely spot, when the priest's companion turning to him, said, "Father, this is the spot where I murdered your brother," and he then detailed the circumstances of the crime. The priest said nothing at the time, but the next morning had a warrant issued for the arrest of the murderer, who was tried, convicted and hung. For fifteen years this man had, through a sense of duty, stifled the instincts of nature, until, when the history of the crime was admitted to him outside of the confessional, he felt at liberty to bring the criminal to justice. Here, then, is an example for physicians to follow. They should treat their patients' confessions as confidentially as did this priest the story of his brother's mur-

derer, lest by neglecting to do so they may cause misery altogether at variance with the philanthropic nature of their profession.

POST-MORTEM EXAMINATIONS.

There is a widespread and eminently natural aversion among the average public against allowing post-mortem examinations upon the bodies of relatives and friends. The dead brother, sister, mother, father, wife or husband is considered far too sacred to be desecrated by the knife of the surgeon; hence permission to make a post-mortem examination is, in the majority of instances, refused. That this ought not to be so, we all, as physicians, fully realize. It is an admitted and universally accepted fact that something can be learned, that some benefit to science can be derived, from a critical examination of every dead body. A careful and accurate ante-mortem diagnosis may have been made, the accuracy of which is fully attested by the autopsy; yet some anomaly of anatomical arrangement, or some pathological condition, unsuspected during life, that might account for some symptom so trivial as almost to have escaped notice, will serve as a small point, the aggregation of many of which may do much toward furthering the science of pathological histology. The more post-mortems we have, the more rapid will be our advance in all that pertains to the intelligent and practical, as opposed to the empirical and theoretical, treatment of disease. We of to-day, as a class, are opposed to cremation, because it is not the prevailing fashion of disposing of the dead; yet our ancient Roman ancestors, when in the zenith of their intelligence and power, considered this the most proper way of terminating the existence of the body. So with post-mortem examinations. We are opposed to them, and consider them harsh and unnatural, because they are not fashionable. Physicians should endeavor to combat and overcome this prudish and anti-scientific sentimentality. They should take every opportunity, in ordinary conversation with patients and friends, to impress upon them the benefit to science and the advantage to mankind in general that would accrue from a more general allowance of post-mortems. By degrees, this course would tend to break down the social barrier that now exists, until the public would come to regard the autopsy as much a necessity following the death of a relative, as they now do the funeral. By this means, easily and gradually accomplished, we would be enabled to prosecute our pathological studies with ten times the rapidity that is now vouchsafed to us.

Notes and Comments.

An Important Contribution to the Physiology and Pathology of the Stomach.

Dr. Ludwig Eringer (*Deutsch Arch. f. Klin. Med.* Bd. 29, Heft 5 and 6) has contributed the following interesting observations to our knowledge of the physiology and pathology of the stomach:—

The author made a large number of experiments on himself and on many other persons, to decide at what time during the state of digestion free muriatic acid appears in the gastric juice. He found that the latter contained a plus of free muriatic acid during the second hour after a moderate meal, and during the third and fourth hours after an abundant and rich meal.

The examination of the gastric juice in a case of typhoid fever elicited the fact that the masses vomited during the period of the highest fever contained a large amount of free muriatic acid. As the results so far gained in this direction have been contradictory, this new addition to the chemistry of the digestion of persons suffering from high fever is rather important.

Examinations into the amyloid degeneration of the stomach showed, in eleven cases, that the vessels of the walls of the organ were also affected, more or less, by the same process of degeneration; frequently the muscularis, especially the muscularis mucosæ, often a part of the areolar tissue of the mucosa and the glandular structure, participated in the same morbid alteration.

The considerable dilatation of the stomach the author brings into causal connection with the coexisting considerable amyloid degeneration of the muscular walls of the organ. If the latter do not possess the tonus any more which is necessary to enable them to carry the weight of the contents of the stomach, a passive dilatation, its degree depending upon the amount of the contents, will temporarily ensue, and gradually

change into permanent dilatation, as the peristaltic movement becomes less and less sufficient for the locomotion of the contents of the organ.

Concerning the development of ulceration in cases of amyloid degeneration, the fact was noted, that it is not the amyloid parts which are attacked by this ulceration, but those parts which are not suffering from amyloid degeneration, but which, not being provided sufficiently with blood from the degenerated vessels, fall a victim to the destroying influence of the gastric juice, which only an ample supply of alkaline blood can prevent. The physiological function of the stomach in cases of amyloid degeneration of the vessels of the mucosa of the organ undergoes this change, as proved by the frequently repeated examination of the contents of the organ in five such cases; that the gastric juice, at the proper time, exhibits a want of free muriatic acid.

Regarding the symptoms during life by which the physician, under certain circumstances, may be able to recognize this participation of the stomach in the amyloid degeneration, Frerichs first drew our attention to the fact that in the beginning the appetite vanishes, and from time to time vomiting takes place, while the tongue is not coated. But Eringer contends that these symptoms are so little definite and subject to such diverse explanations, that they can hardly be considered as possessing any diagnostic value. According to E.'s experience, the amyloid degeneration of the vessels of the stomach by itself does not exert any influence at all on the appetite; so that we will have to await further observations. Vomiting with clean tongue, absence of tenderness in the epigastric region, and amyloid degeneration in other organs, are the symptoms mainly to be relied upon. In conclusion, we will only add, that the favorable action of acids, and especially of muriatic acid, in cases of typhoid fever, seems to receive an explanation by the facts above mentioned, and that the latter give us the hint not to administer acids, for the purpose of assisting digestion, immediately after a meal, as heretofore done, but about two hours after the same.

The Rapidity of Conduction in Patella-Reflex. (?)

A. Eulenburg has lately made some interesting observations concerning the so called patella-reflex. He employed the graphic method and observed results, which, in one direction at least, were quite decided and uniform. He found that, in healthy persons, with very, very rare exceptions, the length of time consumed after a strong tap on the ligamentum patella, till the quadriceps femoris responded by contraction (duration of latency), never exceeded $\frac{2}{6}\frac{2}{2}$ of a second (=0.03226). Cases in whom this time is still shorter, and may be said to vary between $\frac{1}{6}\frac{1}{2}$ and $\frac{2}{6}\frac{2}{2}$ of a second were frequently noticed among strong and healthy adults. In cases where, from some morbid cause, this same reflex (?) excitability is increased, the duration of latency can fall even below $\frac{1}{6}\frac{1}{2}$ of a second (to 0.016313). The (centripetal-centrifugal) paths, along which the impression and the motor-impulse have to travel, to cause this phenomenon, amount to about one meter in length, while the velocity of conduction in the nerves in the normal state is equal to about 33.9 meters in a second. If it be true, as cannot well be doubted after the careful researches of Eulenburg, that the duration of latency in healthy individuals varies between $\frac{1}{6}\frac{1}{2}$ and $\frac{2}{6}\frac{2}{2}$ of a second, and that the same is less, even, in pathological cases, then the theory of the reflex character of the phenomenon becomes a very doubtful one. Further, we have proof of the fact that the duration of latency diminishes in the same ratio as the phenomenon itself appears less pronounced; if the conduction in the centrifugal nerve-paths becomes so slow that it falls below a certain norm, the patella symptoms cannot be observed any more. This proves what Westphal contended from the very beginning, that these phenomena are not of a reflex character at all; they are in intimate connection with the so called muscular tonus and with the integrity of those peripheral paths which receive the irritation and carry it further. The latter theory would also better explain the absence of this phenomenon in locomotor ataxia; here the tactile sense is decidedly diminished, and the muscular tonus as decidedly decreased.

Successful Sponge Grafting.

In the *Medical Times and Gazette*, Dr. W. Winslow Hall reports a case of sponge grafting in a girl, age twenty, who was suffering from two large ulcers on the dorsum of the left foot. She was a pale, anæmic girl. The larger ulcer was three inches in diameter and one inch deep. The other one was smaller. She was given cod-liver oil, and charcoal poultices were applied to the sores, which were syringed twice each day, with carbolic lotion (one to forty). Under this treatment the ulcers took on a more healthy appearance. A thin slice of ordinary sponge was soaked in a very strong solution of carbolic acid for fifteen hours, and then carefully washed in a more dilute solution, till there remained but a faint smell of the acid. Bits of this sponge slice were now

packed into each ulcer until rather above the level of the adjacent skin, and a cotton band age was applied over all. After about three months and a half, the patient left the hospital. Her progress was slow but uninterrupted. New skin spread gradually under the margins of the sponges, and as these margins became loose they were clipped away. The former ulcers are covered in by healthy skin almost on a level with the surrounding skin surface.

In this case the preliminary treatment consisted merely in disinfecting the sponge with carbolic acid. And as the case wore on it became evident that the sponge-tissue was not becoming incorporated in the patient's foot. It rose by degrees in the wound, and fragments were clipped away from its surface. In time it became stationary, and then new skin spread under its edges, so that, in fact, the sponge was slowly shoved out by the new tissue replacing it. In the event of the occurrence of a similar case it would be interesting to compare the quantity of sponge placed in the ulcer with the sum total of the fragments clipped away during the progress of the case. The employment of sponge-grafting was undoubtedly of value in this case. Nature had been allowed to treat two similar ulcers on the same leg, and had left two large cicatrices firmly adherent to the underlying bone. These caused great deformity, and could hardly be called perfect results. The result of the use of sponge-grafting was that a pliable cicatrix was obtained almost on a level with the neighboring skin; the foot was saved from deformity, and its usefulness was not impaired.

Phthisis Among Needle Manufacturers.

The *British Medical Journal* says: In his recent report to the Stratford-on-Avon Combination of Sanitary Authorities, Mr. G. H. Fosbroke again comments upon the not uncommon prevalence of phthisis among needle manufacturers. During 1880, no fewer than 45 deaths happened from this disease, 24 being registered in Alcester, which had then a population not exceeding 20,000; the remaining 21 deaths occurring in the Evesham and Stratford Districts, which contain together a population of not quite 26,000. Fourteen of the 24 deaths in Alcester took place in two sub-districts, both of which are needle manufacturing centres. A somewhat similar mortality was registered during 1881, phthisis being held responsible for 24 deaths in the Stratford and Evesham Districts (population 24,597), whereas in Alcester, with a population of 17,387, there were 26 deaths. Mr. Fosbroke regrets that he is unable to give an explanation of this mortality, since the inspection of these needle manufacturing factories does not come within his province. Whether it is in consequence of such trade employment, or that the workmen so generally keep their workshops too hot and "close," he is not in a position to say. This appearance of phthisis is, as Mr. Fosbroke observes, well worthy the consideration of factory inspectors; but it is also still more worthy the attention of the Medical Department of the Local Government, an inquiry by which, on the present state of the question as to the lung-diseasing conditions of various industries, is much to be desired. Such an inquiry was made on a large scale by the then Medical Department of the Privy Council, in 1860-4, and Mr. Simon always recognized the importance of continuing the investigations on the subject. A series of fresh inquiries by various inspectors was indeed begun under his auspices, in the year 1873, but the results were never published, and administrative changes put a stop to their further prosecution. The question is, however, one of no little hygienic as well as practical interest, and deserves exact and systematic study by a skilled investigator.

Carbolic Acid in Typhoid Fever.

At a recent séance of the Soc. Méd. des Hôpitaux (June 9th), a discussion occurred on this subject, provoked by the memoir of M. Desplats, of Lille.

According to this physician, carbolic acid has a very powerful antithermic action, the temperature being very speedily reduced, but mounting after a short time to the former figure. On this account sufficiently large doses are required, M. Desplats carrying the dose to several grams daily. The best method of administering the acid is by enema, from two to three drachms in ten to twelve ounces of water; if the urine becomes dark colored, it will be necessary to diminish the dose. As conclusion, M. Desplats considers carbolic acid a good anti-thermic remedy in typhoid fever, of facile employment and not at all dangerous.

In the discussion which followed Mm. Dujardin-Beaumetz, Damaschino, Rathery, and Siredey, mentioned cases where the carbolized enemeta had been retained and had induced grave collapse, the general temperature falling from 104° to 95°, sweating occurring to such a degree as to cause great anxiety.

M. Dreyfus employed this method for about a year at the Hotel Dieu, and had on several oc-

casions symptoms of collapse ; the temperature remained reduced but about four or five hours, and the constant sweating seemed to wear out the patients. M. Feréol was of the same opinion, the course of the fever being in no degree changed by this medication, the constant sweating weakening the patients, and symptoms of collapse being often apparent. M. Dujardin-Beaumetz resumed the entire discussion by saying that carbolized enemata constituted a powerful antiseptic medication, but produced, sometimes, dangerous symptoms, and should be employed with caution.

Nitrite of Sodium in Epilepsy.

In the *Practitioner*, Dr. W. T. Law relates one case in which the nitrite of sodium proved so beneficial that it would seem well to record it, in order that the drug may have a more extensive trial in this terrible and hitherto intractable malady. The case was a typical one of epilepsy, occurring in a man aged twenty-nine, of a low order of intelligence, of unexceptionable habits as regards drink and morals. The seizures commenced after a prolonged season of excessive study in endeavoring to prepare for a college examination. The appended table gives the result of the various forms of treatment tried:—

Weeks.	Seasons.	Number of Fits.		Total.	Remedies Used.
		Day.	Night.		
14½	Summer.	—	28	28	Brom. of pot. sod. and am.
4½	Winter.	2	7	9	Borax.
23	Winter and Spring.	11	15	26	Bromides with intervals of iron and aloes.
22	Summer.	3	12	15	Bromides with bellad.
14	Winter.	2	1	3	Nitrite of sodium.

The Spread of Infection by Rags.

In the *Practitioner*, Dr. H. Franklin Parsons contributes a very interesting article on this subject, from which we note his conclusions as follows:—

1st. That cases of infection by means of rags do occasionally occur, although, comparatively speaking, not very frequently.

2d. That smallpox is the disease most likely to be thus conveyed.

3d. That all rag workers should be vaccinated and re-vaccinated.

4th. That dust should be avoided. The preliminary dusting of the rags before sorting is to be recommended, but the dust should not be allowed to contaminate the air of the work-room.

5th. That certain measures of disinfection are available, among which exposure to air, fumigation with sulphurous acid, and exposure to hot air or high-pressure steam may be mentioned, each of which has its advantages and drawbacks under certain circumstances.

6th. That in the absence of means by which it may be known whether or not rags have been infected, the cases in which disinfection would appear specially desirable are (*a*) rags from places where epidemics are known to exist; (*b*) rags in a filthy state ; and perhaps (*c*) foreign rags, especially if coming within the two previous categories."

Recognition of Death.

At the recent meeting of the Connecticut Medical Society (Boston *Medical and Surgical Journal*) Dr. G. L. Porter called the attention of the Society to the fear of being buried alive, so prevalent among the public. He made quotations to show how this morbid idea had at times seized hold of the greatest minds. For this reason he wished to impress upon physicians the necessity of familiarizing themselves with the signs of death, so as to be able to allay the fears of overly nervous friends and relatives. After relating the usual signs, the speaker said that the tests offered by the ophthalmoscope were as decisive as any. After death the capillary redness of the disc is lost, and gradually the arteries fade out and become indistinct, until at last they are wholly indistinguishable. If any circulation is maintained, at least a pale redness will enable the capillaries of the disc to be seen.

Dr. Thompson mentioned as a test of death, a small black spot which appears between the iris and the outer angle of the eye, round or oval, enlarges and moves downward and inward until it reaches the iris, when it appears as a concave spot which slowly grows larger. Its cause is supposed to be the changes after death rendering the opaque coat of the eyeball transparent.

Obscure Epigastric Pain.

In the *Lancet*, Dr. Edward B. Gray reports a curious case of obscure chronic epigastric pain, in a man otherwise apparently healthy, which teaches how difficult it is to diagnose duodenal ulcer. The patient, aged 58, had complained of pain "across the pit of the stomach and through the loins" for two years. He was well nour-

ished, appetite good, epigastrium only slightly tender to pressure. He was regarded by his friends as a hypochondriac. Suddenly he vomited over twenty ounces of bright-red blood. He was ordered twenty minims of the tincture of the perchloride of iron every three hours, to keep to ice and iced water, and to remain absolutely at rest on his back. About midnight of the same day he passed between a pint and a half and two pints of clotted blood from the bowel. He passed no more blood, but two days subsequently he was suddenly seized with severe epigastric pain, fainted, and died in a few minutes. At the post-mortem, the stomach and intestines were found full of blood. The sole lesion discovered was a small, deep, ulcer, of the diameter of a split pea, clean punched out of the otherwise healthy mucous membrane of the duodenum. At the bottom of the ulcer was a small perforation in the pancreatico-duodenal artery. The other abdominal organs were healthy.

Ozonized Air as a Hypnotic.

C. Binz has made a number of experiments with ozone, which he published in the *Berl. Klin. Wochenschr.* (1 and 2, 1882). The idea, based alone on speculative reasoning, that ozone as such could never enter the circulation, because it would undergo chemical alteration before it ever could reach the blood, and that in case it even got into the blood it would produce difficulty in breathing, on account of development of oxygen, has been disproved by the following experiments of Binz. For the preparation of ozone he used W. Siemens' pipe for quiet discharge of electricity, provided with the latter by four Bunsen elements and an inductor capable of giving sparks of two ctm. in length. The ozonized air was carried to animals kept under a well ventilated glass globe. The influence of ozone on different species of animals is alike as to the kind, but different as to the degree of effect. In frogs only a slight depression is noted. They act under the influence of ozone as if half asleep. Rabbits, but still more, cats, exhibit a decided depression of the brain. These animals seem deeply asleep, the eyes almost totally closed, and they show no reaction when a tap is given to the glass globe. The respiration appears unimpeded. Investigation has proven that this state of depression ensues before the respiratory passages are anatomically changed.

The experiments on human beings, who inhaled the ozonized air by aid of the usual mask, resulted, after seven to sixteen minutes, in causing sleep. The sensation before the sleep was agreeable, and respiration easy. Just before sleep sets in the person is overcome by a feeling of indifference and seems to be dreaming. Pulse, pupils, and the color of the face are unchanged. With some persons a full sleep could not be induced.

If a large quantity of ozone is inhaled, symptoms of irritation may appear, besides those of depression, viz: irritation in the throat, cough, with twitching of muscles, nausea, and even vomiting.

While these experiments may not possess any immediate value, as the effect of ozone is too transient for the latter ever to be employed for surgical purposes, as nitrous oxide is used, they give us, at least, an explanation why, in cases of sleeplessness and nervous irritability, a sojourn at the seashore, in forests, and on mountains, is so highly beneficial, as in all these localities the air contains a large percentage of ozone.

Treatment of Ophthalmia Neonatorum.

M. Galezoswki's treatment consists simply in touching the conjunctiva with the following solution, using a camel's hair pencil for the purpose:—

℞.	Argenti nitrat.,	gr. x
	Aquæ destill.,	℥ j. M.

After touching with this solution, another pencil dipped in a solution of common salt should be passed over the parts, to neutralize the excess of the silver salt.

Such is the method exclusively employed by M. Galezowski in his opthalmological clinic at Paris; he uses no other means against excessive suppuration, intense chemosis or ulceration of the cornea, if they occur. And yet, out of 400 cases treated in his service, not one eye was lost. Treated in this manner the malady requires from five to six weeks for complete cure.

Tracheotomy.

In the course of a lecture on this subject by the late Professor John T. Hodgen (St. Louis *Courier of Medicine*), the following valuable paragraph appears:—

"Right here is a point to which I wish to call attention. Not infrequently—in fact, as a general rule, when a child has been struggling for breath for hours, it may be, and an opening is made into the trachea so that the air enters easily and freely—there will be, after one full inspiration, an entire arrest of all respiratory movements for

several seconds, so that one who is not prepared for it may be alarmed. But if you watch the face you will observe that even while the respiration is arrested the color is constantly improving; the livid hue is passing away, and the natural hue is returning to the lips and cheeks and brow, and after a few seconds, sometimes as much as half a minute, the respiratory movements are resumed, and the child breathes easily, falling into a quiet sleep. The explanation is apparent; the child was poisoned with carbonic acid, and there was oxygen in the air inhaled by the long inspiration after the trachea was opened.

Tannic Acid in Albuminuria.

The *Lancet* says that in the course of some experiments on albuminuria, Ribbert examined the influence of tannic acid on the excretion of albumen through the renal glomeruli. He found that when albuminuria was artificially produced in two rabbits, to only one of which tannic acid was subsequently given, and the kidneys were excised and heated, to coagulate the albumen, in the one receiving the tannic acid the amount of albumen was much less than in the other. From this and other experiments he concludes that albuminuria of traumatic origin may be arrested by tannin, and that it may prove useful in nephritis, as recommended by Frerichs. He believes that it will be useful chiefly in the earliest stage of nephritis, which he thinks always commences in the glomeruli, and that its use should be continued for a considerable time.

Pneumothorax and Tuberculous Orchitis.

At a recent meeting of the Soc. Méd. des Hôpitaux, M. Vallin presented a patient who had some time before suffered from orchitis, seemingly of traumatic origin. The inflammation in the testicle is subject to frequent exacerbations, accompanied by fever. M. Vallin is of opinion that the inflammation is of a tuberculous nature, for the patient presents all the physical signs of pneumothorax, but unaccompanied by any general symptoms.

This pneumothorax is evidently of tuberculous origin, for there exist evident signs of pulmonary excavations under the left clavicle.

Jaundice with Hydatids of the Liver.

According to most authors on diseases of the liver, jaundice is a rather rare symptom in connection with hydatid cysts in the organ. This opinion is contested by M. Ortiz Coffigny, in his inaugural thesis (*Thèse de Paris*, 1881). He describes three forms of jaundice under such conditions: the first is temporary and due to congestion of the biliary passages; the second, of longer duration, is due to obstruction and inflammation of the canals, and the third is grave or pernicious jaundice. The most common form of icterus in hydatids of the organ is due to obstruction of the ductus choledochus. Jaundice may be of sudden origin or come on slowly. In the first case it is almost certainly a sign of rupture of the cyst into the biliary passages; coming on more slowly, it is almost always due to pressure on the larger canals by a cyst developed about the hilum of the organ.

Special Reports.

NO. VII.—HEART DISEASES.

(*Concluded from page* 109).

ACUTE FATTY DEGENERATION OF THE HEART.

Dr. Samuel West also presented to the same meeting of the Pathological Society (*Lancet*), the following unusual case: It was a specimen of acute fatty degeneration of the heart in a young man aged eighteen. Two months before admission to the hospital he had a mild attack of rheumatic fever, after which he suffered from malaise and slight pain. He got steadily worse and was admitted into the wards. The heart was enlarged, and there were mitral and aortic murmurs. After a week his feet swelled, then jaundice and hæmoptysis occurred, and death soon followed. At the autopsy old cicatrices in the lungs were found. The heart was remarkably yellow and minutely speckled with small, yellow spots, and was so fatty that the oil ran off the cut surface. There were small, recent vegetations on both mitral and aortic valves. The muscular fibres showed fatty degeneration, but no interstitial change. Such cases are not common. Those that have been recorded appear to fall into three groups. The commonest depend upon anæmia, usually chronic, but occasionally acute, such as that caused by repeated bleedings. Then we have the degenerative group, in connection with acute fevers and phosphorus poisoning. In the third group there has been previous inflammation of the muscle; thus, some cases of sudden death in rheumatic fever, with acute myocarditis, have been recorded. The specimen exhibited probably belonged to the third group. The question was asked whether such disease could exist without causing any symptoms except slight malaise, as it was a very

important medico legal point. Decomposition very rapidly gives the appearance of fatty degeneration to the heart. Mr. Doran always found it in the usual rough examination of hearts commonly met with at autopsies. The question was not answered.

INCOMPETENCE OF TRICUSPID VALVE.

Dr. Bedford Fenwick presented a specimen before the Pathological Society of London (*British Medical Journal*). He related the clinical phenomena noted during life, which consisted chiefly in a double cardiac murmur, œdema and marked cyanosis. The mitral orifice was much contracted, while the tricuspid was much dilated. He thought it an instance of secondary tricuspid incompetency. He could only find fifteen such cases so recorded as to be of any use for statistical purposes. He found that stenosis occurred more often in women, and considered this to be due to two causes. First, to the lesser strain on the heart in women, which allowed greater rest to the valves and more prolonged apposition, and secondly, to the fact that the valves are relatively larger in women.

CARDIAC MURMURS IN THE PUERPERAL STATE.

Dr. Angel Money communicated a paper to the Royal Medical and Chirurgical Society (*Lancet*) on this subject. The observations were made on 111 consecutive cases. Murmurs were heard in 84 cases, or about 75 per cent. The great majority of the murmurs were located over the right heart. There were two cases of undoubted structural disease. The patients who possessed a murmur for the most part did not suffer from symptoms referable to the heart. The time of the murmurs was invariably systolic. The murmurs are divided into three sorts. The first (resembling an ordinary endocardial murmur) was most numerous; was of blowing character, soft, usually low or medium pitched, fairly long and heard with almost every cardiac beat, and presented but little variation during the course of its existence. The number of these was 51; 36 were loudest over the tricuspid area, 8 over the mitral area, 6 over the pulmonary, and 1 over the aortic. By tricuspid area he means the fourth left interspace, just a little to left of left edge of sternum. The murmur was conducted to a variable extent. The duration of the murmur was variable. Most commonly the murmur was first heard a day or so after delivery. The most novel and interesting, the tricuspid murmur, is believed not to be due to tricuspid regurgitation. He can arrive at no definite conclusion as to the mode of production. The second kind (friction like) was almost absolutely non-conducted, was heard over a very small area, just above and to left of ensiform cartilage. The murmur seemed superficial, was high pitched and stiff in quality, and was not audible with every cardiac beat. This sort was heard twenty-nine times. The mechanism is probably exocardial friction. The third kind of murmur, the least numerous and the most capricious, was remarkable for its loudness, was very inconstant, *i. e.*, not heard with every cardiac beat, and was very transitory; its area of audition was remarkably limited, it was most frequently heard over one or other base of the heart; it was commonly associated with an excited condition of the heart and pyrexia or mental emotion. Besides pyrexia, excitement and anæmia, this murmur was sometimes associated with râles in the chest, and with a cough, but no sputa. The quality of the sound varied. In many cases it resembled the quality of the sound evolved when a piece of silk, tightly stretched, is scratched with the nail; or like the sound heard when pressure is made on the carotid, in anæmic cases. The murmur was in all cases heard when the breathing was stopped. This murmur was heard sixteen times. The mode of generation of these murmurs was regarded as very puzzling. All the murmurs of the second and third kinds, and the majority of the first kind, were temporary phenomena. Murmurs in the puerperal state are not (as a rule) indicative of cardiac disease. Dr. John Williams has verified these observations in a large number of cases. The murmurs were curious and remarkably frequent, being almost a physiological phenomena. Dr. Finlay said that a point of some interest was the effect which change of posture had upon these puerperal murmurs. He saw a case in which a soft systolic murmur was audible over the whole præcordia, and in addition, a loud, musical systolic murmur over the aortic cartilage, and the second right interspace and the adjacent part of the sternum. These murmurs become almost inappreciable when the patient turned to either side, and disappeared completely when she sat upright.

CONGENITAL CARDIAC DISEASE.

Dr. W. B. Hadden related to the Pathological Society of London (*Lancet*) the following case: The patient was a female child four months old. On admission to hospital the face was pale, the hands and lips livid, the chest expanded badly, respiration 66. Lung resonance in front impaired, but breathing vesicular. No cardiac murmur was heard. Improvement followed the next day. On the third day there was dullness over the left lung anteriorly, and scattered dull-

ness at both bases, with crepitation and rhonchi. Before death respiration was 96 and temp. 101. The heart weighed four ounces, average weight at this age being less than one ounce. Septum between ventricles imperfect above, admitting the whole of the middle of finger. The right ventricle was much hypertrophied, a quarter of an inch thick in some places, its cavity dilated. Musculi papillaries much hypertrophied, as was also the left ventricle. The foramen ovale and ductus arteriosus were practically closed. Pulmonary artery large and the aorta inversely small. It was considered worthy of note that the heart weighed nearly five times the normal amount.

ACUTE ENDOCARDITIS—PYREXIA—EMBOLISM—DEATH.

In the *Medical Times and Gazette*, Dr. H. Ashby reports two cases of endocarditis which he thinks take rank between the simple ordinary endocarditis and the malignant form already discussed. Clinically, the form to which he desires to call attention is accompanied by a systolic mitral murmur, angina-like pain in the præcordial region, pyrexia of an intermittent type, wasting, increasing weakness, the phenomena of inflammatory emboli, and more or less enlargement of the liver and spleen. The first case ran its course in about five months, having what was probably embolism of dorsal artery of foot and later splenic embolism. The second case was cut short by embolism of the left middle cerebral, softening of the arterial wall, aneurism, and finally hemorrhage and softening of the brain. The condition of both hearts was almost exactly similar. The roughened edges of the mitral valves, the numerous fibrinous, tag-like concretions attached, were present in both; also a similar condition of endocarditis extending into the left auricle and creeping up the left wall for an inch and a-half. It is interesting to note that the effects produced by embolism in these cases were not mechanical. alone, but the inflammatory processes set up were due to the nature of the emboli. The red, painful swelling on the dorsum of the foot, the lymph on the surface of the spleen, the aneurismal swelling of the middle cerebral, were silent witnesses to the inflammatory processes affecting the valves of the heart.

MUMPS, WITH ENDOCARDIAL MURMURS.

Dr. John Appleyard (*Lancet*) reports a case of mumps, in which a friction sound was audible over the right base of the heart, near the second rib cartilage. There was no increase of dullness over cardiac region. The parotid inflammation was transferred to the testis and the murmur continued. When desquamation commenced the patient was very weak, and a faint, blowing (systolic) murmur was audible over the pulmonary artery, not appreciably changed by pressure. When the patient recovered, the murmurs disappeared.

RUPTURE OF THE CORONARY ARTERY.

Dr. H. W. Lilly, of Fayetteville, S. C., reports a case of death from rupture of the coronary artery, close to its origin. The patient was a man 50 years of age, of large frame and healthy appearance. He was attacked with severe pain in the breast, and on auscultation, a confusion of sounds that took neither the form of defined râles nor of any of the usual auscultatory signs, was heard. The pulse was quick and intermittent every third beat, respiration labored and shallow, countenance anxious. The man soon became worse, with great dyspnœa and threatened syncope, and died suddenly four hours after he was first seen. The pericardium was found to contain blood clots and bloody serum. The aortic valves were studded with vegetations, and the neighboring part of the artery was atheromatous. The right coronary artery was mottled with small, yellowish-white, irregularly distributed, superficial patches. Just above the semilunar valves the degenerating process was more marked, and a rent was found in the vessel, one-sixth of an inch long, running parallel with its course.

The recent literature on heart disease is very meagre; all that has been written, of interest, during the past six months, has been embodied in this report.

Correspondence.

A Discreditable Literary Act.

[We publish, without comment, the letter below, which we have translated from the German original, merely stating that the work was published by a New York house, *contrary* to the author's expressed wish.—Ed. Reporter.]

Ed. Med. and Surg. Reporter:—

I apply to you, as the editor of a really independent medical journal, to permit me to print in it the following lines, which are certainly not without general interest.

I refer to a translation of my work, *Die Neben wirkungen der Arzneimittel* (The Accessory Action of Medicine), which has been made, directly against my will, by a New York physician.

While I was negotiating with a firm in America about a translation, Dr. Alexander, of New York city, asked my permission to translate it. I declined his request, stating the above reason.

Hence, I was justly astonished, when, recently, I received, through my publisher, a copy of my work, translated by Dr. Alexander, contrary to my expressed wish.

I regret that between Germany and the United States there is no treaty to protect the rights of authors, and I hope this example will aid in showing the importance of one. All the more unpleasant is it when such action is committed by a fellow physician; for certainly the ethics of the physician should be international, and not cease because an ocean separates its members.

Yours respectfully,

DR. L. LEWIN,

Docent in the Berlin University.

NEWS AND MISCELLANY.

Inoculation.

During the course of an address on "Preventive Medicine," delivered before the Tri-County Medical Society by the President, Dr. R. C. McEwen (*Med. Annals*), he paid the following tribute to the discoveries in inoculation of the present day:—

"But the possibilities of the future are unknown. Scientific truths that had their birth in days long past afford no subject for the cynic now, as we live in the enjoyment of benefits from their practical application. It was the growth of a century that developed the wonders of worlds in space and compelled the intelligent mind to accept the Copernican doctrine; yet its author was subjected to the anathemas of the theologian, and his published works incited the superstitious to curse him as heretical. The twitchings of the hind legs of the frog interested the scientist and afforded amusement to courtier and peasant, yet the electric spark encircles the world, and nations are cemented in community of thought and interest. *The future of inoculation* may excite a smile of incredulity, but the seed now sown may become the tree under whose protecting branches the nations to come may enjoy an immunity from disease, only foreshadowed, perhaps, in the present, but waiting the roll of years to become perfected truth, and be added as another blessing from the hand of science, ministering to the comforts and necessities of man."

The Cause of Malaria.

In connection with the National Board of Health, the health authorities of New York, Connecticut, Rhode Island and Massachusetts have undertaken a series of investigations to endeavor to determine the true nature of the malarial poison. The experiments of Klebs, Tommasi-Crudelli, and Sternberg, will be repeated. The laboratory work will be carried on by Dr. W. F. Whitney, of Boston. Physicians throughout the country are asked to coöperate in these investigations, by giving answers to the following questions:—

(1) Has malarial fever in any of its forms prevailed in your town or vicinity during the past year, or does it now prevail?

(2) If so, please state—

(*a*) The number of cases of which you are cognizant.

(*b*) At what season of the year the disease has prevailed.

(*c*) Whether the persons so affected reside near any pond, reservoir, or stream, and if so, how near and in what direction?

(*d*) How many of the persons included in answers to questions, *a*, *b*, and *c*, have had malarial fever in previous years, and how many have been exposed to malaria in other places?

(*e*) Can the disease in any case be traced to the use of drinking water from malarial districts?

(3) Has malarial fever been known in your vicinity in previous years?

(4) Did it exist the year previous to its appearance in your town in any town nearly adjacent. If so, please state where, and how far away?

(5) If malarial fever has ceased to prevail during this or any previous year, state any causes which may appear to you sufficient to explain this relief.

(6) What other diseases have been endemic or epidemic in the town at any time during the year.

Physicians in localities where malarial fever is prevalent need not fear to injure their neighborhood by answering these questions, since such information will not be published at present.

The Toner Medical Library.

Dr. Joseph Meredith Toner has given to the United States, for permanent preservation in the library of Congress, his entire collection of books, pamphlets and periodicals, between 20,000 and 25,000 volumes. This includes the most valuable collection of American medical publications to be found anywhere. Dr. Toner has devoted much time and money to the gathering of this library, and proposes to continue adding to it during his life, and to create a fund to still further increase it after his death. The gift has been accepted by Congress, with suitable provision for its care and preservation.

Items.

—Congress is still disgracefully wrangling over the remuneration of the physicians who attended the late President Garfield.

—A French newspaper reports the deaths of a mother and five children from eating poisonous fungi in mistake for mushrooms.

—Dr. T. Gaillard Thomas has accepted his former position of Clinical Professor of Diseases of Women, in the College of Physicians and Surgeons, New York.

—The important Chair of Clinical Medicine at Vienna—Skoda's chair—lately vacant through the death of Professor Duchek, has been offered to Professor Nothnagel, of Jena.

—Materialists sometimes quote the words of Kant, "Give me matter and I will explain the

formation of a world; but they omit his other words, "Give me matter only, and I cannot explain the formation of a caterpillar."

—Mr. Charles G. Francklyn, in whose seashore cottage President Garfield died, has just founded and endowed a sanitarium for poor children, at Elberon, in memory of his young daughter, Gladys Francklyn, who died recently in Paris.

—Dr. B. W. Richardson, nothing daunted by the work of resisting the drunkenness of the age, has just been presiding at Exeter Hall, over the foundation of a Society for the Suppression of Juvenile Smoking. We heartily wish the Society success.

—In Newcastle, England, a new kind of organization has been established, called the Invalid Loan Society, whose object is the lending of clothing, furniture and such other articles as will minister to the comfort of those who are both needy and sick.

—In Kent, England, a band of young men, it is said, have established a society for the "Protection of the Natural Form of Woman," and, according to one of the rules of the society, bind themselves, "by demonstration, argument and entreaty, to induce their sisters and all ladies who are injuring their bodies for the sake of fashion, to sever the remaining link which connects the present generation with barbarism." By another of the laws the members promise to live a life of protest against the fashions so prejudicial to health.

OBITUARY NOTICE.

GRIFFITH J. SCHOLL, M.D.

The subject of this sketch, Dr. Griffith J. Scholl, departed this life at his old homestead at Hecktown, this county, on Saturday, July 8th, at 7 P. M., at the advanced age of 82 years. Dr. Scholl was a son of Dr. Philip Scholl. He was born at Allentown, Lehigh county, on August 22d, 1800. During his childhood his parents removed to the State of New York, where he spent his younger days and received a liberal education. In after years he took up the study of medicine in the office of his brother, Dr. Henry Scholl, who practiced his profession in Lehigh county, and in due time graduated at the University of Pennsylvania. He practiced his profession in Lehigh and Northampton counties for a period of sixty years, and was a resident of this county over forty years. Dr. Scholl was a successful practitioner, and was more generally known throughout this county, by reason of his advanced age and long service in his profession, than any other member of the medical fraternity. He was blessed with a vigorous constitution and was seldom confined to his bed by illness. Dr. Scholl enjoyed more than a mere local reputation. His counsel was often sought by patients from a distance. In his manner he was genial; in his professional opinion he was discreet; not bigoted or prejudiced. In the sick-room he was calm and collected, and above all, he possessed a manner that gained the confidence of his patient. He was a close observer, a student throughout his life, and as his years advanced his enthusiasm did not diminish. He was honorable and upright in his dealings, kind and truthful to his patients, and always loyal to his profession and professional brethren, never taking part in the petty jealousies and bickerings which too often mar the career of professional men. For sixty years Dr. Scholl followed industriously, honestly, and I believe conscientiously, the calling of his choice, until, two years ago, he was stricken with paralysis, when decided inroads upon his remarkable physique became evident. From this period his health varied, but he continued to practice medicine until about six weeks ago, so that it may well be said he died in harness. On July 3d he had another attack of apoplexy, which ended in death. His sadly bereaved consort, aged 80, survives to mourn the loss of a good and kind husband, three sons and two daughters a kind and affectionate father.

His funeral took place at Hecktown on July 12th, attended by a very large gathering of professional friends and others from all parts of the county. PHILOS.

Bath, Pa., July 12, 1882.

QUERIES AND REPLIES.

W. O. S., N. Y.—Dr. Hamilton prepares sponge for grafting by soaking it in a mineral acid, in order to dissolve out the spicules of lime and silica. He found that the network of keratode so obtained became filled with granulation tissue, and in time became practically a part of the patient's body.

MARRIAGES.

FOWLER—WAUGH.—On Tuesday, June 20th, 1882, in Cohocton, Steuben county, N. Y., in the Presbyterian manse, by Rev. John Waugh, the father of the bride, Thomas B. Fowler, M.D., and Ida Waugh.

FRITTS—WYNKOOP.—At the residence of the bride's parents, in Syracuse, N. Y., on Wednesday, June 14th, by the Rev. E. Van Slyke, assisted by Rev. Charles W. Fritts, of Fishkill-on-the-Hudson, Dr. Crawford Ellsworth Fritts, of Hudson, N. Y., and Emma Judson, only daughter of Jonathan G. Wynkoop.

GOODNO—HANSBURY.—June 27th, 1882, at the residence of the bride's parents, by the Rev. W. S. Goodno, of Asbury Park, N. J., Charles F. Goodno, M.D., and T. Addie, daughter of H. S. Hansbury, all of West Philadelphia.

GUY—PARRY.—On June 1st, at the home of the bride's mother, by Rev. S. C. Jennings, D.D., S. J. Guy, M.D., of Homeworth, Ohio, and Miss Jeannette Parry, of Allegheny County, Pa.

IREDELL—WILLIAMS.—At the residence of the bride's father, in Trenton, N. J., by Rev. J. R. Westwood, on Thursday, June 29th, 1882, Dr. Harvey Iredell, of New Brunswick, and Miss Emma Williams, of Trenton.

DEATHS.

ATWATER.—At Centre Harbor, N. H., July 13th, after a short illness, Dr. William Atwater, of this city.

BRUSH.—At Norwalk, Conn., July 8th, 1883, Francis V. Brush, M.D.

GREGORY.—At his residence, No. 189 East Seventy-first street, New York, on July 6th, 1882, Dr. Orson S. Gregory.

HOPPER.—At Hackensack, N. J., July 8th, Dr. H. A. Hopper in his fifty-eight year.

LEVIS.—On the 19th inst., Mary E. H., wife of Dr. R. J. Levis, of this city.

WADE.—In New York, Friday evening, June 23d, Dr. Charles H. Wade.

YARROW.—At 4 A.M., on the 17th inst., at his residence, Alloway, N. J., Thomas J. Yarrow, M.D.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

SULPHATE OF SODA IN ACUTE ARTICULAR RHEUMATISM.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

Sulphate of soda is one of the remedies that had its day of great usefulness, but has been largely, almost entirely, superseded by the less nauseous sulphate of magnesia. Forty years ago Eberle wrote, "this salt is one of the most common and useful purgatives we possess." At this day it is rarely thought of by the profession as a physic to be commonly prescribed where a saline cathartic is needed. I think it to be, in many respects, far superior to the sulphate of magnesia, and when properly administered, scarcely more nauseous to the taste or harsh in its action.

But I will not refer here so much to its general therapeutic value as to what we have found to be its advantageous effects in acute articular rheumatism, and in general muscular aching and soreness.

I am not, as yet, sure of its mode of action, but believe its chief value lays in its power to eliminate urea and uric acid from the blood by its rapid, free, watery, cathartic action. Whether it has any chemical effect to change the excess of lactic acid in the blood, or simply eliminates it, I do not know. I simply know, as a clinical fact, that I have found sulphate of soda to suddenly change the whole character of a case of threatened rheumatism, or of well established rheumatism, in a day or two days, from one of danger and suffering to one of comparative ease and commencing convalescence. I append the report of a few cases in practice, and leave the reader to try this agent as occasion may require, or give it the go by as he may see fit. But I should be happy to have reports from any who fail or succeed with this agent. If it has ever been commended for acute articular rheumatism I am not aware of it.

Mr. R., German, æt. 39, carpenter; works in a dry shop; has been subject to rheumatism, having had several severe attacks that confined him to bed for three to eight weeks. He is an industrious, temperate, good citizen. Came to me early in January, 1882, with a "bad cold" and general muscular soreness, but also with pain and swelling in the right knee and pain in both ankles, rheumatic in character. Said he felt all the symptoms common to his previous attacks of rheumatism, and was quite anxious to escape his prospective weeks of suffering, if possible.

℞.	Sodii sulph.,	ʒ iss	
	Acid sulph. arom.,	♏xx	
	Sacch. alb.,	q. s.	
	Aquæ,	ʒ viij.	M.

Sig.—Take at once, hot, on an empty stomach.

This was followed by ʒ ij of soda sulphate, dissolved in water, well sweetened, every three to four hours. The first full dose produced five or six very free watery discharges, from which he experienced considerable relief. He followed up with the other smaller doses of the same salt, and kept the bowels freely open, but not to the extent of producing any considerable intestinal irritation. Free diuresis was also produced by the remedy. He went to his work two days after commencing the treatment, and had no further trouble.

This was not a case of well established rheumatism, it is true; but one where every needed premonitory symptom was present.

Miss T., aged twenty-one, of strong, muscular build, generally of good health, but subject to rheumatism, had inflammation of her elbows, then of the wrists; this changed to her right shoulder, then to the right hip and knee. Had been several days afflicted. There was no symptom lacking to establish a moderate case of acute inflammatory rheumatism.

℞.	Sodii sulph.,	℥ ij	
	Acid sulph. arom.,	♏xx	
	Sacch. alb.,	℥ iv	
	Aquæ. q. s. to make	℥ viij.	M.

Sig.—Drink half at once and the remaining portion in two hours.

This was also given hot, on an empty stomach. It operated freely, producing several large, watery stools. Suffered considerable nausea soon after taking it, but no other inconvenience. This was followed by sodii sulph., ℥ ij every three to four hours, given in plenty of sugar, with lemon juice. Her commencement to recover dated from the free catharsis and continued unto completion, which was about the third day, since which she has not felt any rheumatic pain.

Miss B., aged twenty-four, of full habit, rheumatic temperament, heavy set, strong, muscular build, generally has excellent health, being only subject to chronic granular ophthalmia and a scurfy skin disease, now and then troublesome. In November, 1881, was called to see her; found the ankles greatly swollen, red, and painful. The right knee was also somewhat swollen and tender; right hip painful. Her suffering at night was excruciating. Her pulse was 110, tongue heavily loaded, fever well marked, temperature not taken. Gave her a free cathartic of magnes. sulph., which operated well. Followed this by the attempted free use of salicylate of soda. This produced such free emesis and continued nausea that the dose was necessarily diminished too greatly to be effective. Then used potass. bicarb. ℥ ss, every three to four hours. This was continued fairly steadily for ten days. There was some improvement in the way of diminished swelling and pain, but the disease was still holding its field obstinately. I now gave, for the first time, a full dose of sulphate soda, *i. e.*, ℥ ij, with the acid. arom. sulph., sugar and water, as before described. This was followed by ℥ ij of the sulph. soda, every four to six hours, as needed to keep up steady action of the bowels. In two days she was fairly convalescent and went on to rapid recovery. Since then she has had no return of rheumatic pain.

Was called recently to see Mrs. S. She was a young married lady living in a house with damp cellars under it, and much up and down stair climbing to do. Found her with swollen ankles and tender feet, knees also painful. Sometimes felt the pains in her shoulders and elbows. Had been in this condition for six weeks, not all the time in bed; indeed, most of the time up, and sometimes trying to do a little work. Her general health was not greatly impaired. Catamenia regular; bowels fairly free; appetite moderate.

℞.	Sodii sulph.,	℥ iij	
	Sacch. alb.,	℥ viij	
	Aquæ, q.s. ad	℥ xvj.	M.

Sig.—Two tablespoonfuls every three to four hours.

On the second day some improvement was noted, and from that date onward it was steady unto complete recovery, which was prompt and quite thorough within a week. She went to her household duties as soon as better, and never ceased to pursue them.

Mrs. D., aged twenty, of light complexion, rather nervous temperament, very active, a hard worker, and very indiscreet as to exposure to heat, cold, or rain. She had an attack of pneumonia in December, 1880, from which she recovered promptly, but in consequence of needless exposure and outdoor exercise contracted a severe cold early in January, 1882. From this there was a rapid development of articular rheumatism, which affected the knees, ankles, wrists and elbows. I found these to be swollen, red, painful, tender, and that motion caused severe suffering; pulse 120; tongue furred white, pointed. There was considerable cough, no appetite, bowels regular, catamenia two weeks since.

℞.	Sulphate of soda,	℥ iss	
	Lemon juice,	q. s.	
	White sugar,	℥ iv	
	Water, ad	℥ viij.	M.

Sig.—Drink half of it hot, on an empty stomach, and the latter half in one to two hours.

This operated well, and was followed by ℥ ij of soda sulph. every four to six hours.

As the pain was very severe at night she had morphia, to control it, but needed none after the second night. Her convalescence seemed to be complete by the fourth day. No relapse.

I find this is a very difficult remedy for some persons to take, on account of the bulk of the dose and its nauseous taste. The former cannot be avoided. The latter can be overcome in a great measure by the use of other agents with it.

The addition of bitart. potass., of lemon juice, or of arom. sulph. acid, ɱxx to xxx, does away with much of the bitter, nauseous taste. Sugar, also, if added very largely, will make it much less disagreeable. But it will nauseate and vomit some persons, prepare it as you may. Full doses are far more effective and less apt to nauseate when given fasting and hot. They also operate far more promptly, *i. e.* in two to three hours, often in one hour. Small doses are easily taken and will bring on and keep up the cathar sis if administered often enough, two to four hours.

I have presented no extreme cases of rheumatism, but some well-marked, moderately severe ones. The remedy either did well for them or they happened to recover quickly while using it. It is not to be expected that this is a specific. I doubt if it is as good as salicylate of soda, but it is easier taken, less depressing and a better eliminator of urea and of the urates, perhaps also of lactic acid. I give this bit of clinical experience for what it may be worth. If a remedy of merit, it will stand ; if not, it deserves to fall.

PRACTICAL NOTES ON THE DIAGNOSIS AND TREATMENT OF ULCERS.

BY G. HALSTED BOYLAND, A.M., M.D., ETC.

(*Concluded from p.* 117.)

Analogous to other dyscrasiæ, it has been essayed to heal syphilis partly by general influences brought to bear upon the process of nutrition, partly by means of specific alteratives. If the first way is chosen, the patient's nourishment must be reduced to such a minimum as the actual sustenance of life will permit, and at the same time he shall drink freely thin and purging drinks; the secretions should be, as much as possible, and in various ways, stimulated by diuretic and diaphoretic means. It is hoped in this manner to hasten the change of tissue and to carry out from the body or destroy the disease germs (?). The principal representatives of this method of treatment are the bitter-salt cures of the English and Zittmann's decoction. Many, indeed, ascribe to the latter a more specific effect.

The most vaunted specific is mercury, among the preparations of which the sublimate, hydargyrum bichloratum corrosivum, and gray salve for inunction, unguentum hydrargri cinerem, have long been celebrated as anti-syphilitics. Yet none of the numerous preparations of quicksilver guarantee against a return of the ev. The best results are probably attained as follows: Rest in bed, in a warm room, with good nourishment, and for a period of three weeks inunction three times daily of from 1–2 ʒ of unguentum hydrargyri cinereum. The former hunger and purgation cure recommended by Lourrier-Rust during inunction helps the healing of syphilis not at all, but endangers to a considerable degree the health of weak individuals.

Salivation, that was earlier considered useful and necessary, is now, and with right, to be strictly guarded against as harmful, and as a condition that can have in its suite often terrible consequences. If the mouth be daily rinsed from eight to twelve times, with a solution of chlorate of potash, one part to fifty of water, and the patient swallows a solution of the same salt, twice as strong (four times daily a tablespoonful), salivation is generally effectually headed off, even in the most energetic inunction cure. A mercurial eczema will appear sometimes during the inunction, and especially in tender skins ; this is not in the least to be regarded as a critical eruption, but only as the result of irritation to the skin caused by the mercury. In order to spare the patient this annoyance the place of inunction should be changed as often as possible. It is best to commence, for instance, with an arm, the next time taking the other; then the four quarters of the body successively, and so on, until the whole body and extremities have been rubbed. Then, after a warm bath, commence from the beginning again. The internal exhibition of sublimate was formerly fraught with difficulties, although its efficacy was recognized, and, indeed, it must be admitted that in taking this preparation by mouth there is an uncertainty, on account of its liability to reaction, as well as on account of its injurious influence on the mucous membrane of the stomach, even when the patient is well nourished. Nevertheless, I have seen the most happy results in the treatment of secondary syphilis from the employment of the following :—

℞. Hydrarg. bichlor., gr.j
Guaiac. resin., grs.c
Gummi. muci., q.s. m. f. pil.xxiv.

Sig.—Take two pills three times a day, immediately after meals.

This treatment must be continued for some weeks. Or

℞. Hydrarg. bichlor.,
Ext. opii, āā grs.v.
Glycerine, q. s. f. l. a. pil.c.

Sig.—Two pills, three times daily ; and continue for a long time.

One case in particular, of very old syphilis, from

among very many others, shows the good effects of minute doses of quicksilver, extending over a long period. This patient was subject to the usual syphilitic headaches, and had on his nose, and arm, and back, several ulcers that had been very obstinate in treatment. They were about the size of a dime. After the pills had been administered for a fortnight they began to take on a more healthy appearance, and finally healed, at the end of four weeks. No potass. iod. was given, either during or after the administration of mercury, and no other treatment of any kind ordered. The patient, however, of his own accord, has daily, morning and evening, rubbed the ulcers with imported white castile soap. The alkali probably did no harm, to say the least; and perhaps, theoretically, some good, but this single circumstance would not warrant any opinion, pro or con, except in so far as the cleanliness of ulcers in general is concerned.

Dr. G. Lewin's* method has received great approbation and wide practice. Fearing, perhaps too much, the inunction cure, and the internal exhibition of sublimate, he introduced, and has now carried out in several thousand cases, the hypodermic injection of sublimate. Lewin uses for this purpose the following solution :—

℞. Hydrarg. bichlor., corrosiv., gr. ij–v
Aquæ destill., ℥j.

with a modified Pravaz-Luër's syringe, containing 36 grains of liquid.

As the stick of the lancet-like point, as well as the injection itself, is painful, those places on the body are chosen for injection where the cutis is less sensitive, namely, on the back. The quantity of sublimate injected, once daily, varies, according to the requirements of a given case, between one-tenth and one-third of a grain. To insure entire disappearance of existing syphilitic symptoms, the whole quantity necessary was found to be from one and one half to three grains. The results of this treatment were of the most favorable character, both as regards the direct influence on the disease and the guarantee against recidiration. As an especial advantage of this treatment, is to be noted, that the patient is not obliged, during it, to remain either in his bed or even his room, if the weather is at all good, and can, therefore, go about his business and live as he otherwise would.

With the principle fixed, the quantities given, and an ordinary hypodermic syringe, the general practitioner has in his hands, probably, the very best treatment of syphilis. The employment of iodide of potash with mercury would, in our opinion, be better omitted. Being a powerful reabsorbent, it would affect the slow alterative action of mercury; but in inveterate syphilis and after repeated, irregular and very free use of mercury, iodide of potash is of great service. It is, however, useless to begin the treatment of lues universalis with it. If employed too long and in too great doses, it has just as bad, though, perhaps, less apparent, consequences as the analogous treatment with quicksilver. But the certainty of the result is much greater if we begin with a very cautious mercurial course, in a warm room and with good diet, and later attack any recidiration with iodide of potash, or when this fails us, with Zittmann's decoction, raised in strength according to the condition of the patient. With reference to diet, only so much stress was laid upon it a short time ago, as regarded the avoidance of all exciting, and the diminution of plastic (nitrogenous) food, it being deemed necessary as an adjuvant to the mercurial treatment. Such a scanty diet, however, is only suitable to over-nourished or, at most, very well nourished individuals, but can only retard instead of helping the cure in the general run of patients; it is especially to be avoided in such as are weak by nature or from former illness, privations, or, perhaps, medical treatment. Here, also, the physician must discriminate. Especial attention should be paid to the place where the patient stays during treatment. Although a warm room is deemed useful, even necessary, to the patient, it is certainly not intended to say that such a room needs the air less than others, or that, in general practice, a patient should be kept in a small, close room, without sun. Fresh, pure air, and a sufficiently frequent change of air, are as necessary to syphilitic patients, no matter what treatment be adopted, as to others. Finally, the ordinary psychical tendency to melancholia during the treatment of syphilis, more than in most chronic evils, should receive strict attention and be treated by moral counteraction—pleasant books, cheerful words, innocent amusements, etc.

The therapy of scurvy consists, above all, in removing the ætiological features. Good food, especially fresh meat and fresh vegetables, acid drinks, lemon syrup, lime juice, citric acid, etc. livening and tonic medicines, tinctures of iron, soon bring about an improvement, and in cases that have not advanced too far, a cure. Unfortunately, just where scurvy is present in great mass, on ships and in war hospitals, it is left in the power of the physician to procure the

*Charité-Annalen, Bd. 14. Die Behandlung der syphilis mit subcutaner sublimat-injection. Berlin.

most important of these remedies. Although the prevalence of scurvy in armies, in time of war, is generally conceded to be a common occurrence, yet I never saw a case of it during a short service in the army during the great war in America, nor one during a service in the French army, extending throughout the whole duration of the Franco-German conflict; moreover, during a sea voyage of several months' duration, there was not a single case of scurvy on board the vessel, although our only food was in hermetically sealed cans and salt beef. On the other hand, I did have a case of the nature of scurvy on land, and in private practice, brought on by eating too much ham and salt beef. The patient had such a craving for salt that he even employed it on ham and salt beef. The symptoms disappeared slowly after the employment of alkalies, such as soda bicarb., etc., ten grains three times daily, with a dose of calomel at night; saline aperients were also given in the course of treatment. But, in our treatment of ulcers, we must give a very prominent place to topical therapy, as well with dyscrasic as idiopathic ulcers. The question was at first freely discussed, whether, indeed, all ulcers, especially those that have already lasted some time, ought to be healed. Do we not, by suppressing them, take away from the organism a healthful drainage, as it were? As far as healing the dyscrasic ulcer is concerned, no one will be in doubt as to its advisability; but in those that owe their existence to topical causes, and are sustained by the tension of a scar, by atony, etc., it is first necessary to remove the local causes; and this is, perhaps, not advisable, because "a general affection exists, for which the ulcer serves as a kind of drain, and which, after suppression, would make itself felt in a vicarious and dangerous manner." On this point let us hold fast, before all, that we shall not succeed in healing an ulcer of this kind until the general affection is removed. When we allow to nature so great an intelligence as to form a useful, so-called drain, why should she be so simple as to let it readily be closed up. There is, to day, no doubt that the chance cases in which the rapid healing of an old ulcer is recorded are to be explained in quite a different way. Compare "fistula." The main fact is that, in general, old ulcers do not heal rapidly, and that recidiration, even after perfect healing of an old ulcer, takes place uncommonly often. The loss of substance at the place of the ulcer is always filled up by cicatricial tissue. This develops itself on the one hand slowly, and can, on the other hand, through many more insignificant influences, be brought to necrosis easier than normal tissue.

It is also certainly possible for a dyscrasic ulcer to heal without the aid of science, as has already been mentioned in speaking of syphilitic ulcers, of course, without guaranty that with healing of the ulcer the dyscrasia is removed. Then, again, it has been shown, by precise observations, that an ulcer, on account of strictly local difficulty, could not heal when there was no dyscrasia in the body of the patient, or long after it had ceased to exist. The removal of this local difficulty, in all cases of ulcer, has become, in modern times, the principal exercise of the general practitioner, as well as the surgeon. If it is a question of simple ulcer, the treatment employed in suppurating surfaces is all that is required—cleanliness by means of sponging with tepid water, and the application of compresses wet with lead water. Above all, the part upon which the ulcer sits must have rest and be protected from external injuries. Care must, therefore, be taken not to change the bandage too often. The *hypersthenic ulcer* demands, in general, an antiphlogistic treatment. Moistened, warm cataplasms, and oft repeated lukewarm baths render, in most cases, the best services. Patients more seldom bear the application of cold. *Asthenic ulcers* require the exhibition of irritating and astringent measures, notably aromatic fomentations and baths. In *putrid ulcers*, after chemical disturbance of the gangrenous parts by caustics, the disinfectants find a place, then charcoal bandages, or when the locality permits, permanent baths and irrigation. If the inflammatory reaction necessary to healing is wanting with this, we must try and induce it by irritating means (excitantia). *The callous ulcers* demand, for the purpose of removing the chronic inflammation upon which the callosity rests, a position of the part such as will tend to aid the flowing off of the liquids, also the application of cold, and later a compressive bandage, under the influence of which the exudation that has already become fast, will be most easily resorbed. In the application of such a bandage I have found strips of adhesive plaster of the greatest service; also in *fungous ulcers*, in which it is especially necessary to regard the ætiological conditions. *In œdematous and varicose ulcers* our therapeusis is chiefly to be directed against the œdema and varicosity of the veins. Here, the tinct. ferri perchlor., and tinct. digitalis, ten drops of each, alternately, three times a day, with compression, are our best means. The two last forms, especially on the lower leg, where ulcers occur

uncommonly often, are among the most common complications; for this reason we may not unfrequently throw the treatment of these ulcers with that of varices together. The elastic stocking is our mainstay with them. Finally, it is of great importance to remove any malformations that may show themselves on an ulcer, namely, sinuosities whose removal is best accomplished by amputating the undermined borders, so far as they are of considerable thickness: at least they must be slit up. This method is preferable to all others.

The plan of encircling an old torpid ulcer is also excellent. It consists of describing a circle with a razor or other sharp instrument, just outside the demarcation line of the inflammatory zone surrounding the ulcer. The rationale of this proceeding has already been explained in this article. A razor is probably the best instrument, especially one with a heavy back, as by its own weight it will make the incision just deep enough, if guided by the hand of the practitioner.

The signal of beginning to heal is the change of the secretion into good pus of proportionate quantity. Thus the ulcer is gradually changed into a suppurating surface that then cicatrizes in the usual manner. There is a pathological reciprocation here, for just as an ulcer becomes again a suppurating surface, so a suppurating surface, notably a wound, can change into an ulcer, especially when a considerable loss of substance has taken place. As soon as cicatricial tissue can form, a suppurating surface is made out of the ulcer; as long as there is no cicatricial tissue formed, ulceration continues. As regards technical distinction, recent authorities accept the following four stages in the healing of ulcers: 1. Stadium detersionis. 2. Stadium suppurationes. 3. Stadium granulationis. 4. Stadium cicatrisationis. The definition of these by no means sharply separated stages is indicated by the natural process of healing. This embraces ulcers in general, lupus included, in the treatment of which the dyscrasic as well as the local therapy must be kept in mind. By combining both, and attacking the constitutional and local diseases together at the outset, the quickest and best results are obtained. Cod-liver oil, preparations of iodine (hydrarg. bijod. rubrum) and the anti-scrophulosa in scrofulous lupus, the anti-syphilitica in syphilitic lupus. If the clinical history of lupus can be accurately traced, a taint of such kind will usually be found as its author. The same principles apply here; constitutional treatment alone, while improving the general condition of the patient, will not remove the ulcers, which local treatment alone might do, but which it will be more likely to accomplish when aided by constitutional treatment. Among the salves most useful are: one scruple sulph. jodat. to one ounce of lard, and one to two scruples of iodine to one ounce of mercurial ointment. If these do not produce other results than a superficial irritation, we must at once employ caustics, the choice of which is immaterial. The quickest, surest, and least dangerous, is the following; zinc chlor. one part, to two parts of meal. Chloris. of gold is certainly, at least, as efficacious, but too expensive. Burying small pieces of caustic potash in the lupous tissue also causes a thorough breaking down of it. The employment of argent. nit. requires more time and is more painful. The galvano-caustic leaves other therapeutic measures far behind; it is so easy to burn the little ulcers with the blunt point of the instrument. The actual cautery is seldom good to employ, because there are unavoidable heat rays which spread to the surrounding parts, and it is on the face that we find a very large proportion of lupous ulcers. If the locality permits, the knife merits the first place, especially where, by a little plastic management, it is possible to replace the part carried off. But as long as the neighboring parts show any traces of lupus it is better not to undertake any plastic operations, on account of the danger of recidiration.

Hebra considers exfoliative lupus as an idiopathic local disease, and uses only local treatment. He readily agrees with us, however, as to lupus serpiginosus, lupus hypertrophicus and exulcerans.

We see no reason to abandon our ground that all lupus will be found, provided the clinical history can be got at, to rest upon a dyscrasia.

I have found, in my own practice, tar ointment, as prepared officinally, an excellent dressing for syphilitic ulcers, in conjunction with a mild mixture of mercury and sarsaparilla internally. The tar salve acts as an irritant, and inflames the ulcer at the first, but this soon yields to an agreeable reaction. I order it to be applied, morning and evening, on a piece of soft linen, kept in place by a bandage. In one case of syphilitic ulcer of the ankle, which had been much inflamed by over exercise on the part of the patient, a middle-aged married man, and father of several healthy children, still living, one application of tar salve seemed to increase the inflammation, but in a few hours this disappeared, and after a second application, the inflammation was reduced to a very great extent, the size of the ulcer

d minished, and its general appearance became more healthy. This patient did not consult me but twice. Several months later I met him. He was going about with free use of his ankle, not complaining of further local inconvenience, and much improved in general health. Several years had elapsed, the patient told me, between his first syphilitic infection and the appearance of the ulcer. About its development and direct exciting cause, he could not give me exact data.

STRICTURE AT THE SIGMOID FLEXURE OF THE COLON.

BY C. H. MERRICK, M.D.,
Of Seattle, W. T.

Mrs. R. is a delicate lady, twenty-seven years of age. For some time she has been troubled with constipation and hemorrhoids. Previous to my visit to her she had been treated by two gentlemen of the homœopathic school, for constipation. What medicines and potencies they used I do not know, except that the gentleman employed previous to my taking the case admitted that, having no hope of her recovery, he had given her large doses of morphine, "to keep her quiet." At my visit I was informed that it was then twenty-one days since she had a movement from the bowels. The abdomen was not so very tender to the touch, but very tympanitic; the flatus in the small intestines distending the abdominal walls so that the patient looked like one at full time for confinement.

The impression on the mind of my predecessor was that there was intussusception of the intestines. I thought not, as I discovered the descending colon, for six or eight inches above the sigmoid flexure, to be filled with hardened fæces, and learning that she had been treated to large doses of morphine for more than a week, I expressed the opinion that it was a case of impaction of the natural excrement of the bowels.

As I write for the benefit of the medical profession, I will give a brief sketch of my treatment of the case. Of course, I prohibited morphine. I gave sodæ et pot. tart., rhamnus purshiana, sodæ sulph., and hyoscyamus, as laxatives, keeping her quiet with chloral hydrate and bromide of potassium. To subdue fever and inflammation I depended upon aconite, gelseminum and digitalis. Let me remark here that these remedies were used singly; I avoid compounds as much as possible in all my practice. Of course, the usual external applications were made, and enemas occasionally repeated, although she had been, previous to my first visit, nearly worn out by attempts to distend the bowels with water. A half dozen times or more I attempted to introduce a rectal tube, but owing to the great pain which it caused I failed to insert more than a few inches of the instrument. The temperature of the patient never exceeded 101°, generally ranging from a fourth to one degree below or above normal heat. Her pulse ranged from 110 to 140, and at times with other symptoms, indicating a speedy dissolution of soul and body. A surgical point of some interest must be mentioned here. Deeming any rational procedure justifiable to relieve her intense agony, I did not hesitate to plunge an aspirating needle into various distended intestines as they bulged up beneath the thin walls of her abdomen. Eight times, and in as many localities, I repeated the operation, in each case causing the intestine to collapse and giving the patient temporary relief. No peritonitis or other unpleasant result followed these punctures.

I wish also to correct another popular impression which I have known some physicians to assent to. The picking at the bedclothes, grasping at invisible objects, *muscæ volantes*, is generally thought to be an infallible sign of a fatal termination. So, also, is stercoraceous vomiting, subsultus tendinum and singultus. All these ominous symptoms were present for several days, yet the patient is now convalescing most favorably.

On the twenty-seventh day I discovered that the plug of hardened fæces in the transverse and descending colon had softened, so that by massage and taxis I dislodged the mass, moving it upward. I then became convinced of what I had suspected, that there was a stricture at the sigmoid flexure of the colon. I sent for Dr. G. A. Weed, who kindly came to my assistance. He advised a renewal of the attempt to insert the tube, under anæsthesia. He administered the "A. C. E." mixture, and I insinuated my fingers and finally my hand into the rectum, and found it a complete *cul de sac*. I soon discovered a small depression not larger than the os tincæ of a virgin womb. Into this I wedged my index finger and then the middle finger, and spreading my fingers to the utmost of my strength, managed to dilate the passage. I then inserted the flexible tube and withdrew my hand. With a stomach pump I now threw in warm water and then allowed it to escape through the tube. By repeating this operation a gallon or more of fluid fæces was withdrawn. The patient soon fell into a quiet sleep, and her progress to recovery, to this date, has been rapid and satis-

factory. The sphicter ani, so put upon the stretch, is recovering its power. The dilated stricture continues open, and strong hopes are felt that another operation to insure its patency will not be required.

I have no desire to say a word disrespectful of my homœopathic friend who preceded me in the case. I believe, in certain kinds of work, a gimlet and tack hammer are useful tools. I prefer to have a whole chestful to select from, and in this case my friend had certainly, in the use of morphine, borrowed our sledge hammer and was using it in rather a wild and desperate manner.

A DENTAL HERESY.

BY HENRY S. CHASE, M.D.,

Of St. Louis, Mo.

Like the professions of medicine and divinity, that of dentistry has at last its heresy. It is called the "New Departure" by the dental journals, though who first gave the movement that title is not known. The New Departure is not only a new method of practice, but the theory upon which the practice is based is also new.

As this practice involves methods of saving the natural teeth entirely diverse from the old methods, it may not be uninteresting to glance at its history.

About eight years ago Dr. Fletcher, of England, announced in the dental journals that nine out of every ten gold fillings leaked. That is, the gold plug did not exclude saliva from the cavity of decay in which it was placed to do such duty. An "experimental dental club" in this country demonstrated the truth of the assertion, much to the disgust of its members.

About this time Dr. Palmer, of Syracuse, N. Y., asserted, in the *Dental Cosmos*, of Philadelphia, that the failure of operations with gold lay mainly in its incompatibility with dentos (tooth bone), forming with the latter a galvanic battery of low power, but of constant operation, of which gold was the negative element of the battery, and dentos the positive. As is well known, it is the positive element that suffers chemical disintegration in the battery.

The entrance of saliva under and around a gold plug in a tooth gives the condition of a constant battery, and consequently, a constant decay of the tooth at that point.

Dr. Chase, of St. Louis, and Prof. Flagg, of Philadelphia, early took hold of the subject, and not only made extended investigations themselves but also interested several gentlemen, who are teaching physical science in well known colleges and universities. The latter confirmed the theories of the "New Departure Corps" by experiments in the line of metallurgy and magnetism. The writer has not the liberty to publicly give the names of these gentlemen, but the editor of this journal has them.

When the results of these investigations were given to the dental profession through its magazines there ensued great excitement, and for six years there has been war between the "New Departure men" and the "gold men." But the present condition of the heresy is well put by an eminent dentist, and president of an important dental society, in the following words, written in a private letter, recently, to Professor Flagg:—

* * * * "I feel, as I know do hundreds of others, that I owe much to you and your confreres, Drs. Palmer and Chase, for the work you have done in making more plain and practicable the great business of *saving teeth*, and although it is still the fashion to deride the 'New Departure' doctrines in the dental meetings, I know of none who have not been influenced by them; and I believe there are not many who do not apply them at this day, in practice."

The outcome of the whole heretical movement is this: gold as a filling material takes an inferior position.

During the eight years that this subject has been under discussion, the thought of the profession has been turned toward the discovery of materials that would be in more electrical harmony with tooth-bone than gold is, and also make water tight or saliva tight fillings; and there has been great success in this line. Alloys of metals have been made, which, being amalgamated, make not only water-tight plugs, but even those which will exclude alcohol as a test of completeness, and which have a tint more in harmony with the color of the enamel than gold has.

Besides metallic alloys there are chemical combinations made at the instant of introduction into the cavity of decay, which are in comparative electrical harmony with dentos, and are, indeed, the positive element in the dental battery.

There are other heresies that need not be described here, belonging to the New Departure, which tend to the preservation of the dental tissues, and which materially simplify operations.

The whole movement is one of immense importance to the public, and I think this is the first time it has been made known to them in print, excepting through dental journals.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Cystitis—Dilatation of the Urethra.

Gentlemen: The first case that I shall bring before you to-day is one of cystocele. Let me first read her history. She is twenty-one years of age and has had two children, the youngest of which is eighteen months old. Both her labors were very difficult. They were instrumental labors. Since her first labor she has been troubled with irritability of the bladder. After the second labor matters became worse, so that she is now in a very wretched condition. She suffers from frequent micturition, burning in the act of passing her water, and constant vesical tenesmus. The urine contains pus, and frequently blood. She has purulent leucorrhœa and laceration of the cervix. There is a good deal of pain caused by touching the bladder. She is at present nursing her child The urine has been examined, and contains a good deal of albumen, which I fancy is owing principally to the presence of blood and pus. There appears to be no renal trouble whatever.

Here, then, is the history. She has passed through various courses of treatment. She has consulted a great many physicians, and taken any number of medicines, medicines chemically adapted to the condition of the urine and diuretics, without any relief whatever. She says that she has to pass her water every half hour. This I think is an exaggeration, but if she is obliged to get up every hour during the night, you can understand what a tax it must be on her strength. In addition to this strain on her system from the irritability of her bladder, she is nursing her child. I have seen the most woe begone patients whose only trouble was this condition of their bladders.

It is barely possible, although I have no evidence in regard to the matter, that the traction made with forceps was not made in the axis of the superior strait or in the axis of the curve of the pelvic canal. If the physician had drawn the head forward too much, it would have pressed the bladder against the pubic bone, setting on foot a cystitis. I have often seen inflammation of the bladder caused by the way in which the head is drawn out. As I say, I have no right to make such a supposition in this case; I simply refer to it in order to educate you in this matter. After you have applied the forceps, you should draw the head down in the axis of the pelvic canal; but although you may deliver the head scientifically, you will often find that the woman is unable to pass her water. This may be due to one of three causes. In the first place, the mucous membrane of the urethra may have become swollen, from the pressure of the head upon it; in the second place, she may have lost power over the extrusor muscles of the bladder, they being temporarily paralyzed; and in the third place, the long labor has so weskened her that she is unable to cause the urine to flow by contracting the abdominal muscles, which are really the chief extrusor muscles of the bladder. For these reasons we may, after a difficult labor, find the woman unable to pass her water. It should always, under such circumstances, be drawn; but you are young, you have never passed the catheter, and you do not care about doing it. The woman may tell you that she is unable to make water. You say to her "It will come around all right after a while. I have known physicians leave the bladder go thirty-six hours without emptying it, and often an incurable cystitis follows this lack of common sense. In such cases, always pass the catheter, on your finger if you can, but if you cannot, call for a light. Never allow any time to elapse after the woman has begun to desire to pass her water. After a tedious labor, and often after an ordinary one, there is such flaccidity of the tissues that the bladder will become enormously distended without the woman complaining.

Suppose that cystitis has occurred; what will you do? The water should be drawn, either by yourself or the nurse, or if you live four or five miles from your patient you may use a self-retaining catheter. This Skane-Goodman is the best. Then you should put a suppository into the rectum. A very nice one contains—

℞.	Extract opii,	gr. j
	Extract belladonnæ,	gr. ½.

One-third of a grain of the belladonna may seem very small, but many women are so impressible to its action that you have to begin with a small dose. In these cases I often give belladonna by the mouth, in the form of the sulphate of atropia. A poultice may be put over the lower part of the abdomen, and in the course of a few days you will find, in the majority of cases, that the cystitis has disappeared. But, if you do not treat the case properly the trouble may run on until it becomes as bad as it is in this woman.

I shall, in the first place, examine the womb. I find that there is a tear on the right side of the cervix. This leads me to infer that the head presented in the occipito-posterior position. This may have been one reason why the forceps were applied. There is also a small tear on the left side. I do not find any evidence of cellulitis or of the presence of a tumor. The vagina has lost a great deal of its elasticity. This may have resulted from overstretching during labor.

I wish to determine next whether or not the uterus is doing any mischief. I therefore pass the sound. It shows that the womb occupies a very good position. It is a little lower than it should be. It measures three inches, but after two labors, especially if there was laceration of the cervix, we should expect some subinvolution.

I intend to dilate the urethra, but before doing so, I am going to wash my hands, for I have been using my finger to examine the vagina, and I do not want to get these discharges into the bladder. This mode of treatment (dilatation of the urethra) is a very successful one. It is not infallible, but in the great majority of cases it does cure, and even where you do not absolutely cure

the patient, you usually make her so comfortable that she is very grateful.

How will you proceed to dilate the urethra? I take a dilator (Ellinger's, with a slight modification of my own) and gently distend the urethra until it is large enough to admit the tip of my little finger. Then with my little finger I carefully dilate the canal, trying to do no harm. I have frequently torn the margin of the meatus and this rarely heals up, but this does no harm, although I have seen considerable bleeding come from it. I operated once in this hospital, and in going to the ward some time afterward, found that the woman had lost considerable blood. The hemorrhage was easily checked by Monsel's solution. In another case which had a very bad cystitis, I operated before the class and greatly relieved her. She afterwards became pregnant, and the pregnancy started up the old symptoms. I again operated, and tore the anterior part of the meatus. The bleeding was so considerable that I could not check it with the ordinary styptics. I put my finger on it, but as soon as I removed my finger the bleeding returned. I then put in a stitch, down to the pubic bone, including the bleeding point, and this checked the hemorrhage. The bleeding in this case was due to the fact that in pregnancy the veins of this portion of the body are in a more or less varicose condition.

Before using the dilator I shall pass in the sound, to see if she has a stone. If I introduced the sound without ether she would suffer excruciating pain. I feel that the bladder is much contracted and roughened by its contraction and by the prolonged cystitis. There is an erosion of the mucous membrane, as is shown by the presence of blood in the urine. I do not feel any stone.

I shall now pass in the dilator. Although she is snoring under ether she flinches when I dilate. A little urine tinged with blood flows out. As I have said, this is a very successful operation, but I have failed. In one of the worst cases that I ever saw the operation failed. In this lady the cystitis was caused by traveling all day in a stage coach where she did not have an opportunity, with decency, as she thought, to empty her bladder. By and by, when she arrived at her stopping place and had gone to her hotel, she found that she could not pass her water. A physician was sent for, but he was absent, and this caused a longer delay. When he came he had a good deal of difficulty in introducing the catheter, because the distended bladder had caused retroversion of the uterus. From that time (she was then a young lady) until the age of forty-five, when I first saw her, she was a martyr. In her case I dilated the urethra without a particle of benefit.

There is some bleeding here, from a slight lateral tear, which I never saw before in performing this operation. In my book I say that you can dilate the urethra to the size of the forefinger. I want to retract that, for I have had one case in which, after dilating with my forefinger, some loss of control over the bladder followed. My index finger is of medium size; some may have a smaller one and others a larger one. I think, therefore, that if your index finger is of large size, you had better limit yourself to the little finger, using the forefinger only when the dilatation with the little finger fails. I have had to operate in a case where the physician had introduced his thumb. The result of the dilatation being that she had entire loss of control. In the course of a week or two I expect such a case to come into the hospital. Even in the case to which I have referred, where there was this stillicidium, this loss of control, the woman was so much benefited that she did not complain of it.

Now this operation was not original with me. I do not want you to get that idea. I think that it was Mr. Teal, a surgeon in Birmingham, England, who first brought forward some cases of this operation and he was soon followed by others.

What is the rationale of this operation? I cannot tell you positively.

One way that I account for it is this: That the irritability of the bladder produces spasmodic contraction of the muscles of the urethra, causing them to increase in size. We have no true sphincter muscle in woman, but we have a series of little fibres all the way from the meatus externus (the meatus externus has no muscular fibres) up to the neck of the bladder. These little fibres, in consequence of the irritation of the bladder, may have increased in size and strength. You know that if you have an irritable eye, the muscles are continually twitching, and soon become enlarged.

There is another condition in which dilatation would do good. There may be, in these cases, a little fissure at the neck of the bladder. Fissure in ano is very common in women. By the way, do not forget to examine carefully the rectum of a woman who complains of pain when the bowels are moved. Where you find one man with a fissure, you will find nine women. There are two reasons for this: first, the constipation which is common in women; and second, the injuries sustained during labor. I am disposed to think, while I cannot state it confidently, as I have never felt it, that we may have a little fissure at the neck of the bladder. In these cases you will find a painful spot just at the neck of the bladder. Higher up you do not get the same kind of a pain. If this condition is due to a fissure at the neck of the bladder, we should expect overstretching of the urethra to cure it, just as overstretching the sphincter ani muscle cures a fissure in ano.

While I have been talking I have also been working. This urethra has dilated very easily, and I do not find the bladder as rough as I had expected. As I have gotten my little finger in so easily, I shall try to pass my forefinger. There is a little tear on the left side, but that will heal up readily, as it is within the urethra. I shall use my left forefinger, for, as I am a right-handed man, my left hand is the smallest. My forefinger goes in quite easily.

I expect that by to-morrow this woman will experience an immense relief. You would suppose that she would suffer great pain the first time she passes water, but she will suffer far less than she did before the operation.

Dr. Baer tells me that she has had injections into the bladder through a double canula, but I

think there is nothing so unsatisfactory in responding to treatment as a chronic cystitis in woman or in man. I am not cognizant of any case cured by injections through a double canula.

I now have my finger in the bladder, and if there was a stone I should feel it, unless it was incarcerated and so small that I could not find the point where it was lying. I never had a urethra in which I introduced my finger with more ease than this one. I have not ruptured a fibre inside. I feel it pinching my finger as I withdraw it.

Immediately after the operation I introduce an opium suppository, so that she will be under the influence of the opium by the time she recovers from the ether, for women are always in a demoralized condition when they come out of the ether. I introduce an opium suppository after all operations on this part of the body, even after the painless operation for laceration of the cer vix, for there is some soreness here, from the pressure on the perineum with the speculum.

Let me give you a few remedies useful in cystitis in its acute form, at which time it should be stopped. In the first place, the use of the suppository of opium and belladonna referred to ; or, as women are easily affected by belladonna, I sometimes put the belladonna in one suppository and the opium in another. I can then push either as may be necessary. In the second place, never allow the bladder to become too full. In the third place, be very careful, when passing the catheter, not to allow the catheter to be introduced to its whole extent, but only far enough to get the eye beyond the neck of the bladder. Just as soon as the urine begins to flow, stop passing the catheter. Why? Because an irritable bladder resents anything like a foreign body. If you pass the catheter some distance into the bladder, pretty soon the urine flows out, the wall of the bladder will touch the catheter, and just as soon as it touches the foreign body it will flop right down the end of the catheter, bruising itself. It is a good plan to employ a catheter which has a hole directly at the end.

Medication by the Mouth.—Take it all in all, I think atropia is the best remedy. I prefer it to belladonna. I usually give it according to this formula :—

℞.	Atropiæ sulphatis,	gr. j
	Alcohol,	
	Aquæ, āā	f℥ ss. Solve.

Of this I give from four to six drops. Patients rarely take more than six drops without producing dryness of the throat and dazzling about the eyes. If you choose to add soda, sweet spirits of nitre or some diuretic, very well.

When it comes to injections into the bladder, I must confess that my own experience has not been very satisfactory. The proper plan is to inject with a double canula. Injections of the sulphate of morphia may be used in the strength of three or four grains to the f℥. This is not curative. It simply obtunds the pain. Quinine (five grains dissolved in an ounce of water by the aid of dilute sulphuric acid) has a good reputation. Carbolic acid (two, three, four or five drops to the f℥) has also been used.

For chronic cystitis, I know of nothing so good as strong solution of nitrate of silver, beginning with two grains to the ounce and increasing the strength every day by one or two grains until you reach twenty grains to the ounce. Such a solution cannot be left in the bladder very long. Do this: Inject the solution and then begin and count one—two—three—four—five—six—seven—eight—nine—ten ; ten seconds ; then withdraw the fluid. When you employ this injection you usually have to give a hypodermic of morphia, as the pain is very severe. I should, however, not adopt this treatment until after dilatation had been tried.

Editorial Department.

Periscope.

Ether vs. Chloroform.

Dr. T. Pridgin Teale, Surgeon to the General Infirmary at Leeds, thus writes, in the *British Medical Journal*: It is confessedly difficult, perhaps even impossible, to settle, by statistics, the question of the relative danger of these two anæsthetics ; chiefly for the reason that, while we know pretty nearly how many deaths from each agent occur during the year, we have not the means of ascertaining the relative proportions of the cases in which each anæsthetic has been used.

Such being the case, it may be worth while to record the opinions of those who, having for a great number of years had experience of chloroform, have also for many years (in my own case, more than six years), almost abandoned it in favor of ether. I wish, therefore, to tender my conclusions for what they are worth, based, as they are, upon what I have seen in the practice of my colleagues and myself at the Leeds Infirmary, and upon my experience of anæsthetics in my private practice. My conclusions are as follows :—

1. Ether, *properly administered*, is a much safer anæsthetic than chloroform. So much safer do I believe it to be, that I counsel every surgeon whom I can influence in the matter to study the method of its right administration, and to let ether take the place of chloroform. The exceptions I make in favor of chloroform are: in infants, in patients subject to asthma or chronic bronchitis, and also, perhaps, in cases of abdominal obstruction, with difficult breathing, in which an operation has to be performed.

2. When many operations have to be done in rapid succession, to use ether is a great economy

of time. A good "etherist" can get most patients under its influence in from one and a half to two minutes, whereas, in my experience, chloroform must be given from six to fifteen minutes before an operation can be commenced. I am aware that chloroformists trained in Edinburgh usually administer chloroform more rapidly than those trained in English hospitals.

3. A patient under the influence of ether is far more passive, and, therefore, in a more convenient condition for operation, than one under chloroform. As soon as the effect of chloroform is passing off, the patient becomes, as a rule, and often very suddenly, very sensitive to pain; whereas, in the case of ether, especially if the patient have been kept for some time under its influence, the return of sensibility to pain is very slow. In fact, a patient may become so far conscious as to converse with the surgeon while stitches are being placed in the wound, and at the same time be entirely unconscious of pain. This was not my experience of chloroform.

4. When ether is administered without food on the stomach, troublesome sickness is very rare.

5. In using ether, the safety and comfort of the patient, the rapidity of the anæsthesia, and the convenience of the surgeon in operating, depend very directly upon the method of administration employed, and the manner in which the administrator does his work.

6. There are good methods of administration of ether and bad methods, and there are good and bad "etherists." The varying opinions of the value of ether which prevail in the profession probably depend very directly upon the varying methods and manners of administration.

7. It is a bad method to give "ether on a towel," as first taught us by Dr. Joy Jeffreys, to whom England is deeply indebted for his successful crusade in favor of ether. This involves a great waste of ether, ten to twenty ounces being required. The patient's lungs are chilled, and bronchial *râles*, struggling, and maniacal excitement not unfrequently result. I, along with my colleagues, commenced ether under this system as a duty, and by no means an agreeable one, and held on doubtfully when I suspected that some patients probably died from the effects of the chilling of the lungs.

8. It is a bad method to give ether with the American basket-work frame, which, though not much better than the towel, served a good purpose as a step to better things.

9. The good methods are those in which the patient breathes over ether into an India-rubber bag, a method, I believe, introduced into practice by Dr. Ormsby, of Dublin, and carried to further perfection by Mr. Clover. In this method, the patient breathes the same air over and over again for six or eight times, thereby economizing the heat of the air-passages, economizing ether, and enhancing the effect of the ether by partial asphyxia. My experience of the use of Clover's smaller inhaler, under good management, is this: (*a*) A patient can generally be ready for operation in a minute and a half, sometimes in less than a minute; (*b*) There is rarely any struggling; (*c*) Noisy excitement hardly ever occurs—perhaps, in my private practice, once in a hundred times; (*d*) *Râles* in the trachea are but seldom heard; (*e*) Instead of six or eight ounces of ether being used in a short operation, and sixteen to twenty in one lasting an hour or an hour and a half, half an ounce or less suffices for a short operation (such as "sphincter-stretching" or "iridectomy"), and two to three ounces for an operation of an hour's duration, such as colotomy or excision of a joint.

10. The administration of ether by inferior methods is still too common, and was until recently prevalent in some of our larger hospitals.

11. Even with Ormsby's or Clover's inhalers, there is an infinite variety of skill in different etherists.

12. In order to become a good etherist, the administrator must *study how* to give ether, must watch the patient *attentively* while giving it, and during the earlier inhalations must very carefully and *studiously adjust* the anæsthetic to the sensations of the patient.

13. A careful, attentive student, with tact, and not hard and unfeeling, can easily and in a short time be taught to give ether properly.

Since the adoption of Clover's inhaler, I have had singular freedom from anxiety about my anæsthetics—far greater freedom than in the previous period, when I had to depend upon chloroform.

Finally, I would say that this favorable opinion of ether is based upon my experience of its use by a series of very able administrators—some in the Leeds Infirmary, others while acting as my private clinical assistants. Speaking as a looker-on, rather than as an administrator, I should say that the chief points in the right administration of ether are: first, to overcome the nervous dread of the patient by applying the mouthpiece only; then to turn on the ether gently, until the glottis become tolerant and the patient is slightly unconscious; lastly, to complete the anæsthesia rapidly. In advising beginners, I compare the regulation of the quantity of ether to the "curve of harmonic progression."

Addison's Disease.

In the Boston *Medical and Surgical Journal*, Dr. Hall Curtis reports the following case: The patient, aged 54, previously in good health, first began to complain about May 1st, 1881, of exhaustion after rising in the morning, and of difficulty in dressing himself, requiring frequent rests. For some little time before his appetite had been failing. From May 1st to July 1st he lost flesh rapidly. He became somewhat restless and nervous at night. The only prominent symptoms were loss of flesh and strength, and a peculiar color; once or twice looked very yellow. Urine was examined and found free from albumen; color normal; specific gravity 1.015; sediment slight; reaction acid; in fact, there was nothing abnormal about it. In July he went to the seashore, visiting the city but seldom. Took milk freely and all the most nourishing food. Appetite improved slightly, as did his color. On July 2d a consultation was held, and a most critical

examination made, without detecting any disease, although the possibility of Addison's disease was suggested by the discoloration of the face. The blood was examined microscopically, and found to vary but slightly from the normal standard. He was placed on the use of vinum cibi et ferri cum cinchona, and Fowler's solution; the latter, proving too irritating, was omitted. Massage was resorted to, and its influence was marked in improving the capillary circulation and restoring the perspiratory function of the skin, and, also, in reawakening the muscles, nerves, and spinal cord to their normal function. It was noted, on August 21, that during the past thirty-six hours he had been troubled with frequent dejections, thin and yellowish, no blood or mucus, and without much pain. The hands and feet were quite cold. The face was quite dark, almost a copper color, with many purpuric spots and points. On the forehead were large, irregular patches of color of a deeper brown. The eyes were sunken, conjunctivæ slightly congested, and with a tinge of yellow; under the eyes the pigment was nearly black. The deep color of face extended half way down the neck, gradually fading in depth of shade. The hands were quite dark, with spots and flecks of a deep chocolate color, ceasing abruptly just above wrists; the inside of the elbows showed a deposit of pigment, which was also very marked on the outer aspect of the joint.

Treatment consisted in a hot rectal douche three times a day, followed by starch and laudanum enema (fifteen drops to half an ounce), Hoffman's anodyne, one drachm three times a day, hot fomentations to abdomen, hot bottle to feet, claret, glass of milk, with two teaspoons of lime-water every two hours.

He now grew rapidly worse, and it is reported, on August 28, that yesterday he passed a quiet day, taking nourishment freely, requiring no sedative; now decidedly weaker; pulse 128; respiration 32 to 36; intellect duller; voice very faint; one dejection since yesterday A.M.; mouth half open; tip of tongue dry and glazed; passed urine freely this morning; temperature in axilla last evening 98 3° F. 7 P.M. Has been quiet, without complaint; delirium constant but quiet; temperature 99.3 F.; hands and arms abnormally warm; legs cold; pulse 130; respiration 40; eyes closed; pupils respond to light; does not reply to questions; has passed urine twice; unable to drink, or unwilling; fed with a spoon.

The night of the 28th was tranquil. Refusing food, he died, without a struggle, at 9.40 A.M., on the 29th.

Autopsy.—Left supra-renal body was not disorganized; altered in shape from the well-known cocked hat to an irregular, lobulated appearance, the largest lobule the size of a Lima bean. On section, yellowish gray, homogeneous surface, with caseation, here and there softening; the size of organ but slightly increased.

Right supra-renal body presented the same appearance, only more marked; the largest lobule, at top of gland, size of end of thumb.

The other organs were comparatively normal.

Narcotism in Infancy.

Dr. H. Cripps Lawrence says, in the *Practitioner*: Given a healthy child to start with certain results will follow the administration of narcotics, with an equally certain regularity.

1. In the early administration of a narcotic, more or less diversified, according to the temperament of the infant, a modified degree of excitement will supervene, to be followed by sleep; and this favorable condition of things may recur for a period varying from a few days to a week or two. If, however, the repetition of the narcotic be at all frequent, or if it be exhibited in any but a very small amount, this period of favorable narcosis will be proportionately diminished, and the chances of its lethal effect increased.

2. In some infants the effects of the narcotic will be to speedily constipate, for, as in the adult so in the infant, a narcotic lessens at once the secretions and movements of the stomach and intestines, and consequently digestion becomes arrested.

There is, however, a class of cases met with in infancy, wherein infants, the subject of imperfect digestion associated with colic, become for a time benefited by a moderate amount of narcotic. Here the sedative acts by checking peristalsis, and so enables the food to remain a longer time in contact with the digestive juices, and thus to become more perfectly digested. This condition, however, is more frequent in early childhood than in infancy.

A third and more frequent sign of the administration of a narcotic in the infant is the occurrence, sometimes the concurrence, of diarrhœa and vomiting. When these occur a longer time will elapse than when such conditions are absent, before profound narcosis ensues.

3. In addition to the above, diaphoresis and diuresis may occur, one or both. Either of these may and often will be present in an inverse proportion to the other. The predominance of either will be dependent upon the amount of fluid ingesta, the character of the fluids taken, and the condition of the temperature of the weather present at the time. Obviously, warm weather or an over-heated atmosphere will promote diaphoresis, while cold weather would augment diuresis.

4. The intestinal evacuations soon alter in character, becoming paler and more solid in consistency, diminished in their frequency, and increasingly more and more deficient in bile, accompanied by a change in color, from yellowish-green to verdant green, with or without mucus, and if very constipated, accompanied by streaks of blood, owing to the tenesmus which is associated with the expulsion of the hardened, ill-digested fæces.

5. Another vital symptom, though of later occurrence than the preceding, is marked depression of the vital powers, evidenced by sinking of the anterior fontanelle. This is accompanied by other signs of want of vitality, viz., feebleness of pulse, loss of weight, an earthy complexion, wasting, especially marked in the pinched and anxious expression of the face. By this time the infant alternates between efforts at peevish whimpering and imperfect somnolency.

The pupils will be found, in the earlier stages of narcotism in infancy, to be frequently contracted, but when the stage of fontanelle depression is reached they may contract or dilate, and one pupil may be larger than the other. This condition I believe to be dependent upon variations in the amount of fluid present in the ventricles of the brain.

So soon as this stage is reached, any subsequent dose of a narcotic may prove speedily lethal, and the greatest care and caution become necessary to avert an untoward result. It is at this point that I believe the cumulative effect and action of the narcotic assumes a point of much peril to the infant. One of two results may now supervene: either clonic convulsions may set in, though these are not very frequent, or, and much more commonly, profound and perhaps fatal coma.

Malignant Pustule.

Before the Royal Medical and Chirurgical Society (*Medical Times and Gazette*), Dr. J. N. C. Davies-Colley read notes of two cases of malignant pustule, with a table of seventeen cases which had been treated at Guy's Hospital; together with a report of the microscopical examination of sections from the skin of the cheek affected with charbon, by Dr. F. Charlewood Turner. In this paper Dr. Davies-Colley has tabulated seventeen cases of malignant pustule or charbon which have occurred during the last nine years at Guy's Hospital, and he has given more fully the details of two which were admitted into his wards last year.

Case 1.—F. R., aged 31, worked in a hide warehouse, and had been engaged for eight days with Australian fleeces. On April 10, 1881, a small red spot appeared on his right lower eyelid. It grew rapidly. On the 16th he was admitted, with the eye closed, and with a partly dry, partly vesicular, eschar covering nearly the whole of the swollen lower eyelid. He was in little pain, but weak, trembling and feverish. The glands were swollen. Immediate relief followed the excision of the eschar. In a few weeks the wound had healed, but the eyelid remained everted. Bacilli were found in the blood at the time of the operation.

Case 2.—T. W., aged 39, a tanner, had been handling foreign hides until July 2, 1881. He then left off work, and on July 6th noticed a red itching swelling on the cheek. It grew rapidly. On the 10th loss of appetite; and on the 11th he was admitted with a raised, nearly circular patch, of more than one inch in diameter, in the middle of his cheek. The centre of this patch was slightly depressed, dry and nearly black. The sides were covered with small, closely packed vesicles. There was swelling of the cervical glands and œdema of the neck. The eschar was excised, and chloride of zinc applied. He recovered rapidly. A colored drawing of the charbon, and drawings of the microscopic sections of the eschar, showing the bacilli anthracis in the corium and around the hair follicles, were shown.

The author wished to call attention to the following facts: 1. Malignant pustule or charbon is not infrequent among tanners and wharf laborers who have to handle foreign hides and fleeces. 2. It has not yet been observed at Guy's Hospital as a primary disease in the viscera, or in the form of malignant œdema of the integument. 3. It has been seen only on exposed parts of the body—*e. g.*, the face, the neck and arms—the most dangerous position being the neck, probably from its vicinity to the larynx. 4. The seventeen cases were between the ages of eleven and forty-seven, and the majority were young adults of the male sex. 5. Twelve out of seventeen cases occurred in September and the four following months. 6. The disease may be confounded with malignant facial carbuncle, poisoned wounds, and primary chancres of the face. The chief points to notice are the painless character of the eschar, its vesicular margin, and slightly depressed, dry, blackish centre. 7. The nature of the disease is not unfrequently overlooked, and its symptoms have been attributed to such causes as the bite of a mosquito, or the absorption of arsenic through an abrasion. 8. It should be treated at once by excision or free cauterization. Out of fifteen cases in which the eschar was excised, eight were already suffering from constitutional symptoms, and twelve had considerable œdema or glandular enlargement, yet all recovered. The two cases in which excision was not performed were admitted with dyspnœa and other serious symptoms, and it is probable that in them the operation would not have averted the fatal result. 1. Swelling up of the most superficial part of the cutis, with the formation of a ring of papules surrounding a zone of vesicles, at the centre of which is an eschar, is the earliest change recognizable. 2. That bacilli are present in their papules, but not beyond them, being 3. Numerous in the tissue of the cutis immediately below the eschar, and above to its borders, and most abundant just below the Malpighian layer of the epidermis covering the outer part of the eschar.

The President said he thought the case of the gentleman referred to had come under his notice, and he did not consider it a case of charbon. The gentleman had been at the Oxford and Cambridge boat-race on a very hot day, and was bitten under the chin by a fly. He died very soon, of acute septicæmia. The bite had been either poisonous from the first or had been poisoned by scratching from matter under the nails.

Mr. Bryant was sure the disease was not sufficiently recognized, and he ventured to suggest that the very case mentioned by the President was an instance in point. The central, black eschar and indurated and reddened base could hardly be mistaken, and early recognition was of the utmost importance, as immediate operation was necessary, even in doubtful cases, especially where the charbon was situated on loose connective tissue. In his own case, though soon operated on, the œdema spread to the glottis and killed the patient.

A Two-Headed Monstrosity.

Dr. Milner Moore records the following rare and interesting case in the *Lancet*:—

On March 25th I was sent for to see Mrs. A. B., aged thirty-one, who had had labor pains for

more than ten hours, increasing gradually in severity and frequency. She had borne two full-sized children previously, by natural means, the last being two and a half years old. Liquor amnii had escaped at 7 A.M., March 24th, but no pains occurred until midnight, when they set in with regularity. When I saw her at 10 A.M., March 25th the os uteri was only partially dilated, very high up, and the occiput presented anteriorly; pains occurred with severity every five minutes. I watched the case anxiously until 5 P.M., when but little progress in the passage of the head had occurred, but the os uteri was more dilated, pains were strong and frequent, but ineffectual, and all the signs of weariness were coming on. I applied the forceps with some difficulty, owing to the partial dilatation, administered chloroform, and proceeded to use traction, which after some minutes brought the head well down on the perineum and partially through the vaginal outlet. I could not succeed in delivering the head, and at the cessation of traction it receded completely. Examining then once more, and passing my fingers beyond the head, I found what I considered to be the vertex of a twin which seemed to prevent the passage of the body belonging to the first head. At this juncture I sent for my partner, Dr. Dewes, who speedily came. I put the patient completely under chloroform. Dr. Dewes reapplied the forceps, and succeeded in delivering the head, but it receded as soon as released from the blades. Dr. Dewes agreeing with me, after another examination, which revealed an ear high up beyond the promontory of the sacrum, that we had to deal with a monstrosity, decapitation was decided upon, and carried out with some difficulty. As soon as this was done, I could feel a shoulder above the pubis, and a neck and head above the promontory; then, with the concurrence of Dr. Dewes, I passed my hand, seized a foot, and turning the child, delivered with comparative case.

The monster proved to be a large female child, with two heads and necks, one trunk, and two upper and lower extremities. The circumference of its chest at axilla, was 15½ inches, length 19½ inches, and weight 8¾ lbs. The right head presented with occiput anteriorly, and in the second position. On dissection, the following were the positions of the viscera: The sternum was to the left of the body, but the complex heart, which lay behind it, was directly in the centre. The heart consisted of one auricle, from which projected, vertically downward, two distinct cone-shaped pairs of ventricles, those on the left lying one in front of the other, while those on the right lay side by side. From the anterior, thicker ventricle on the left side there proceeded a large vessel which first gave off the pulmonary artery, and then formed a communication with another vessel, which arose from the posterior thinner ventricle, and gave off two branches to the upper limb, and head and neck; by the joining of these vessels, a large trunk was formed, which met a similar artery from the right side, and formed the descending aorta. On the right side a large vessel originated from the thick outer ventricle, gave two branches to the upper extremity and neck, and a communicating branch to the smaller artery, proceeding from the inner thin ventricle, which then went to the lungs; the vessel formed by this junction met its counterpart of the left side two inches from its origin. There was a complete set of lungs on each side of the thorax—that is, two lungs with three lobes in each. The other organs were as in a single child. The spinal column consisted of two spines, having origin from one sacrum, blended together as far as the third dorsal vertebra, where they separated. and rudimentary ribs appeared to be starting from the inner side of the right spine.

The patient made a good recovery.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Two cases of hemi-achromatopsia are carefully reported by Dr. Henry D. Noyes, in a reprint from the *Archives of Ophthalmology*.

——Biology is studied with much zeal in the Johns Hopkins University. Those who would like to see the course laid out for the coming year should write for the *University Circular* in this department.

——The Proceedings of the Alumnæ Association of the Woman's Medical College of Pennsylvania form a pamphlet of 42 pages. The numerous letters read from absent alumnæ represent most of them as well satisfied and in successful practice. Perhaps the dissatisfied did not care to write. Several original articles are added, some of which are reprinted from periodicals. It is evident that females as physicians are acceptable to the community, and have now a firm foothold.

——The contents of *Lippincott's Magazine* for August are light and summery throughout, suggestive of mountain rambles and seaside excursions. "St. Jerome's Day with the Pueblo Indians" is a well illustrated paper descriptive of a half-religious, half-barbaric festival in New Mexico. An "Adirondack Home," by P. Deming, has the well known characteristics of the writer's Atlantic sketches, close observation, quiet humor, and sympathetic treatment of the primitive freshness and quaint features of life in the wilderness. "The Romance of Childhood," by Henry A. Beers, is a charming paper, tinged with a delicate fancy, by turns tender and playful. Mrs. M. G. Van Rensselaer's concluding paper on the Alleghanies gives a deeply interesting sketch of the career of Gallitzin, the prince missionary, who did so much for the early civilization of the mountain regions of Pennsylvania, and, in contrast to this, a description of the Cam-

bria Iron Works, which form the most striking features of the actual life of that district. "Bay Beauties and Bay Breezes," by P. V. Huyssoon, is very amusing, and the other articles are all attractive.

BOOK NOTICES.

How We Ought to Live; a Practical Guide for the Preservation of Health and the Attainment of Longevity. By Joseph F. Edwards, A.M., M.D., etc. Philada.: H. C. Watts Co., 1882. 8 vo, pp. 636.

As time progresses it grows more and more evident that the noblest, the most useful arena for the physician's labor is in the *prevention* of disease. Hence the enormous impetus which of late years has been given to hygiene.

We welcome the volume whose title is given above as a valuable auxiliary in the crusade against those powers which, to use an expression of Matthew Arnold's, make for disease, unhappiness, and the deterioration of the race.

The author has a love for his subject; he has thoroughly mastered its details; he presents them as they are understood by the masters of science; his style is remarkably lucid and attractive, and his work, therefore, one that cannot fail to produce widespread and excellent results. There is in it no hobby-riding, and it is marked by a happy avoidance of that technical language which is so repelling to the general reader. The book may be characterized as a series of agreeably written short essays on almost every topic which touches upon hygiene.

In a general way the sequence of these essays follows that of the life of the individual. The earlier ones are on the care of infants, the care of children at home, and of children at school. To these follow others addressed to adults, on such subjects as the hygiene of building, ventilation, work, eating, exercise, bathing, sleep, dress, and so forth. The objections to the use of tobacco and alcoholic beverages are stated fairly and fully. Special chapters are added for the guidance of persons liable to consumption and heart disease, and the hygienic rules particularly applicable to pregnancy, nursing and advanced age are accurately set forth. The Appendix contains a number of letters from men of very advanced years, giving their history, so far as it throws light upon the rules of attaining old age. These are very interesting, and cannot fail to command the attention of all who take up the book.

In all respects the volume is one which we can heartily commend to the public, and which merits extensive popularity. Were it introduced into every family and read diligently, the misery and mortality of the land would both be greatly diminished.

Syphilis. By V. Cornil, Professor in the Faculty of Medicine of Paris. Translated, with Notes and Additions, by J. Henry C. Simes, M D., and J. Wm. White, M.D. Philadelphia: Henry C. Lea's Son & Co. 1882. pp. 461.

The main questions regarding syphilis are treated of as mostly settled in this work. The author considers the dualism of the chancres as completely established, and proceeds upon this theory. Some of his statements excite surprise, as when (page 33) he says the ordinary period between exposure and the appearance of the infecting chancre is "twenty-five days, frequently six weeks or two months," which seems also to have staggered his translators, for on a later page (98) they say "very rarely six to eight weeks." On such an important point, such contradiction does not impress one favorably.

It is conceded that in "a few" cases true indurated chancre is *not* followed by syphilis, even if left without treatment; and it is also conceded (page 99) that simple venereal ulcer is sometimes followed by the systemic disease. If this is so, the duality is far from established.

The local treatment of true chancre is not considered of much importance. Excision may be of benefit, but caustics are disapproved. The translators believe that excision, in certain cases, prevents the development of the disease.

These practical points have taken our attention from the chief merit of the book. This is as a treatise on the pathological histology of syphilis. It is with the special purpose of showing the evolution of the disease as indicated by histological changes that the author prepared his volume. In this respect it is much superior to any other we could name, and merits the close reading of syphilologists. A syphilitic ulcer appears to be a new cell growth, and to offer peculiarities which separate it from other forms of tissue destruction. These are amply shown by both description and illustration.

The translation is very well done, and the reader will not regret the considerable additions which the translators have inserted in the text, drawing from their own experience and reading. They do not always agree with Prof. Cornil, nor should we ask them to. The volume is a welcome contribution to syphilology.

THE

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LEGISLATION FOR THE PREVENTION OF SYPHILIS.

The more carefully the insidious and deteriorating effects of syphilis are studied, the clearer does it become that the welfare of humanity demands that steps should be taken to prevent its extension. The prejudices of bigots must be disregarded, and the fear of unpopularity must be set aside by the profession in this matter, if its members intend to do their plain duty.

The earnest efforts of a few enlightened men are at last beginning to bear fruit. At the Eighth Annual Meeting of the American Public Health Association, in December, 1880, at New Orleans, the following resolution was offered by Dr. McCormack, of Kentucky, and adopted by the Association:—

Resolved, That for the purpose of securing uniformity in legislation in the States of this Union, for the prevention of venereal disease, the Committee on Prevention of Venereal Disease be reconstituted and instructed to prepare drafts of a State law and of a municipal ordinance calculated to secure the desired results, and report at the next annual meeting of the Association.

In compliance with this, Dr. John Morris, of Baltimore, submitted the draft of an act to the Association, at its meeting in Savannah, last December, which was referred to the committee, with instructions to make a final report at the Tenth Annual Meeting, which will take place in Indianapolis next October.

We give below the outline of the act, and the committee will be pleased to receive any suggestions as to amendments in its form. They should be sent to Dr. Morris at as early a date as practicable:—

An Act, entitled "An Act to prevent the spread of Contagious Diseases."

ARTICLE I. *Be it enacted by the* [Senate and House of Representatives of the State of.....],

That any person within the jurisdiction of the State [or Territory], who shall knowingly communicate, or be instrumental in communicating, directly or indirectly, any contagious disease, such as smallpox, scarlet fever or venereal disease, shall be guilty of a misdemeanor, and subject upon conviction in any court having cognizance of misdemeanor [where the offence may have been committed] [in the State or Territory], to the punishment of six months' imprisonment in the [County Jail].

ART. II. That if any person being the owner, agent or occupant of any house, room or place within the jurisdiction of this State [or Territory], shall have reasonable cause to believe any person located permanently or temporarily therein to be affected with a contagious disease; and shall fail to make such fact known to the proper health authorities [or if there be no such officials, to the nearest magistrate having jurisdiction of misdemeanor], he or she shall be deemed guilty of a misdemeanor, and upon conviction in any court having jurisdiction of misdemeanors [where the offender may reside or the offence have been committed], shall be liable to a penalty not exceeding [five hundred] dollars or to imprisonment not exceeding six months, or to both.

ART. III. That the State Board of Health, with the approval of the Governor, and the Health Board of the City of.....with the approval of the Mayor of said City, shall have power to institute and carry out all suitable measures to prevent the spread of diseases of a contagious character, and may, if deemed advisable, remove to proper hospitals selected by them all persons suffering from contagious diseases, who, neglecting proper precautions, imperil the health of the community.

ART. IV. That this Act shall go into effect from and after the.....day of .....A. D.....

It will be seen that all police regulations, medical inspections and special rules for controlling houses of ill-fame are left for local legislation. This is as it should be, for no one system would suit all cases.

Nor does the act definitively lay down the misdemeanor it contemplates so specifically but that considerable latitude is left to its interpretation. It must remain for the courts to decide what constitutes "reasonable cause." It is plain that no brothel-keeper will denounce an inmate of her own house. The "reasonable cause of belief" must be the statement of a physician occupying an official position, and without this the act will in those cases be of no avail.

If any further evidence were wanted to show the imperative necessity of such an act, it is presented in a paper read before the New York Medico-Legal Society last April, by Dr. Albert L. Gihon, Medical Director U. S. Navy, on "The Prevention of Venereal Diseases by Legislation." A copy of this can be obtained from the author, 1736 I street, Washington, and it should be read by all whose minds are not clear as to the propriety of such legislative action. It presents, in telling language, the ravages of the disease and the cause there is for its prevention whenever this can possibly be effected.

CHLOROFORM INHALATION.

Notwithstanding the many fatal accidents caused by chloroform narcosis, and notwithstanding the many substitutes—ether at their head—recommended and employed, like chloroform, to produce complete insensibility, there are so many points in favor of the latter drug that we cannot be surprised at the many researches which have been instituted, either to detect the real cause of death by this substance, and the circumstances tending to favor and those which possibly may prevent a fatal result, or to find means by which the danger may be lessened, or at least the prognosis be based upon more definite knowledge.

There is no remedy which is so little disagreeable to animated beings and which so rapidly induces complete anæsthesia, as chloroform. We now know that the latter becomes especially dangerous in cases of organic lesions of the heart and of the lungs, and that its inhalation is very apt to be fatal in cases of advanced diffused kidney affections. But then cases have occasionally been met with where it seemed impossible to give any scientific reason for the sudden death, where anæmia of the brain could alone be said to have caused the fatal result. Careful investigations have of late more and more substantiated the fact that such accidents may be avoided, if the chloroform has been recently prepared, not been exposed to the light, and if a small quantity of alcohol (spec. grav. 0.834) be added to the chloroform. Dr. Theo. Clemens, who in 1850* made this question the subject of a thorough investigation, had again, some months ago,† the opportunity to carefully search for the cause of the intoxicating effects of inhalation of chloroform. The latter had been pronounced pure by a chemist, but Clemens found the same "self-decomposition" of the drug he had frequently noticed under similar circumstances. Hager,‡ one of the most reliable of modern chemists, says that chloroform of the spec. grav. of 1.495–1.496 carries in itself all the conditions for a self-decomposition which may act very dangerously on the system. He says, in the work quoted, page 864, "Chloroform in the act of self-decomposition must be considered a very dangerous anæsthetic, and this the more, as the decomposition at the time of evaporation of the chloroform becomes far more active, and the physician should prefer, therefore, the so-called chloral-chloroform. But with a chloroform of a spec. grav. of 1.488–1.492 no such danger is to be apprehended."

Clemens has clearly proven, however, that by the addition of a little *spiritus vini*, chloroform, even after having been kept for years, will undergo no such self-decomposition. Chloroform containing five per cent. of alcohol will also not be altered by light. Clemens directed the treatment by chloroform inhalations of forty-eight cases of grave pneumonia, losing only two cases and employing the drug in the form indicated. Chloroform to which alcohol has been added does not lose any of its narcotic influence, becomes, when

* Deutsche Clinic, Dec. 21st, 1850.
† Medicin Central Zeitung, lx, 1.
‡ Handbuch der pharmaceut. Praxis, etc., Berlin, 1876.

inhaled, more agreeable to the taste, and can be taken by persons unable to inhale pure chloroform.

The importance of this fact will be appreciated if we remember that a number of cases of grave pneumonia with severe orthopnœa have recently been reported by German authorities as cured by the inhalation of chloroform with alcohol, and that the latter method (inhalation of alcohol) has been found to be of greatest benefit in asthenic forms of febrile disorders.

ASCITES IN CHILDREN.

Ascites in children is a rare disease. If it happens, it is generally produced either by tubercular peritonitis or by cancer of some of the abdominal organs. Dr. Seiler, in Dresden, contends (*Berl. Klin. Wochenschr.*, xviii, 26, p. 365) that whenever the causes just mentioned cannot be detected in ascites of children, a diffused syphilitic hepatitis or circumscribed gummata will *always* be found to have given rise to the abdominal dropsy. He thinks that the cases so far reported belong to the category of retarded hereditary syphilis, and that this form of ascites always yields to mercury or iodine, or to a combination of both. At the same time he admits that occasionally this ascites may be caused by a curable, simple hypertrophic cirrhosis of the liver. For better explanation, SEILER gives the history of four cases:—

1. A girl, aged 13, after having frequently complained of not feeling well, without the appearance of any specific signs or symptoms, was taken sick, February of last year, with swelling of the abdomen, which on examination was found to be distended with a rather large quantity of free fluid. June 11th, about five quarts of a serous, light yellow fluid, containing a considerable percentage of albumen, was withdrawn, by paracentesis, from the abdominal cavity, after which operation the liver could be felt as a soft tumor extending down below as far as the middle of the abdomen. Mercurial inunctions into the abdominal walls, and internal administration of iodide of potash, caused a diminution in the size of the liver, and the ascites did not reappear. Cure within six weeks.

2. A four-year-old girl, with really enormous ascites; otherwise perfectly healthy. By paracentesis, four quarts of turbid serum was withdrawn, when it was found that the liver reached as far as the crista ilei. Seven weeks later tapping had again to be resorted to, but this time the quantity of the fluid was less. The same treatment as in the first case was continued for two months, when a tonic treatment was instituted. When, eight months after its admission, the child was discharged from the hospital, the ascites had disappeared, but the liver was still a little lower down than the middle of the abdomen. SEILER saw the girl again when she was thirteen years old, and on percussion, found the size of the liver to be normal. The ascites had never returned.

The third and fourth cases concern a seven and a fifteen-year-old girl, and contain nothing of special interest, their history being similar to the first two cases.

That there may be still other causes producing ascites in children there can be no doubt; the writer of this saw one in which, in consequence of intense inflammation of the portal vein (due to a cold?) and occlusion of the same near its entrance into the liver, the most intense ascites developed itself in a boy nine years old. The case ended fatally. KORMANN has also reported another case (*Jahrb. f. Khkde*, xvi, p. 170, 1880) in which the etiology did not coincide with that given by SEILER.

NOTES AND COMMENTS.

Rupture of the Uterus.

A great deal has been written about the etiology of rupture of the uterus, and the following case, which we find reported in *Schmidt's Jahrbücher* (1882 No. 1) is especially interesting, as no plausible cause could be detected. A laborer's wife, aged thirty-five, and mother of seven children, had again become enceinte. The first eight months the case progressed favorably. At the beginning of the ninth month she became slightly feverish, and continued so for several days, when

she experienced labor pains and went to bed. Soon afterward she was seized with a most violent pain in the abdomen, which was followed by a slight hemorrhage from the vagina. The woman then fainted. A physician was called and he applied a tampon of cotton wadding.

In the afternoon of the same day the patient was seen by Dr. M. Hofmeier, of Berlin. He found her in a state of collapse, throwing herself restlessly about in the bed and crying out with pain. To all appearances the case was one of septic peritonitis. The patient was chloroformed, and parts of the fœtus now became visible through the thin abdominal walls. Dr. Hofmeier opened the bag of waters and extracted the child easily, by the feet, after turning. There was no difficulty in removing the placenta by traction on the cord. Further examination revealed the fact that the uterus was ruptured on its right side, from the fundus down to near the external os, so that the head penetrated, without obstacle, into the abdominal cavity. The latter was filled with fluid and coagulated blood. The patient was brought into the hospital and laparotomy performed. The wound was closed by twenty sutures. On the second day after the operation the patient died. The pelvis was normal, and the contractions of the uterus had evidently been of a mild character only. The rupture was 14 centimeters in length. The fœtus was in the beginning of the ninth month.

It may be supposed that the rupture took place at the moment the patient experienced the sudden pain ; the fœtus had occluded the os, and so the hemorrhage took place into the abdominal cavity. The walls of the uterus were thick and appeared in a perfectly healthy condition. Of fatty degeneration, which was observed in Simp son's case, not a trace could be found. None of all the causes which Bandl mentions as pro ducing rupture of the uterus were present in this case.

Administration of Tannic Acid.

The influence of tannic acid on albuminuria cannot be denied. Even if we should not be able to prevent the progress of the disease to its fatal end, by reducing the quantity of albumen in the urine, or by totally removing it, we stop, at least, a drain of the system, and may thus be able to prolong life by causing a cessation in the waste of albuminoid compounds. Of late, Dr. H. Ribbert, in Bonn, has made some very important researches (*Cbl. f. d. Med. Wissensch*, 3, 1882) in this direction. He contends that we can undoubtedly reduce the amount of albumen excreted, and that our efforts will be crowned the more with success, the earlier in the disease the regular internal administration of tannic acid is commenced. He recommends large doses of the sodium tannicum.

In connection with this, Dr. Lewin (*Deutsche Med. Wochensch.*, 6, 1881, has made some experiments to prevent the disagreeable effect of preparations of tannic acid on the mucous membrane of the alimentary canal. For this purpose he recommends the following prescriptions:—

I. SODIUM TANNICUM.

℞. Solut. acidi tannici, gr.xvi–xxc : f℥ v
Adde.,
Solut. sodii bicarb. q.s. ad react. alkalin.

Sig.—To be kept in a well-corked glass, and used within one or two days.

II. TANNICUM ALBUMINATUM.

℞. Solut. acidi tannici, ℥ ss : f℥ iij
Adde, agitando,
Solut. albumin. ovi unius., f℥ iij.

Sig.—The greater the quantity of the tannic acid, the greater must be, in proportion, the amount of the white of the egg.

III. TANNIC. ALBUMINAT. ALKAL.

℞. Acid. tannic., ℥ ss–gr.lxxv
Aquæ destillat., f℥ iij
Adde agitando,
Albumin. ovi unius,
Sodii bicarb. solut. q.s. ad solut. limpida.

Sig.—Best adapted for a longer course of tannic acid.

Sugar in any form should be avoided in these preparations.

Tumor of the Brain with Decided Eye Symptoms.

Dr. James A. Spalding had for a number of years a very interesting case of tumor of the brain under observation, and we find the case reported in *Schmidt's Jahrb.*, 1882, No. 1, pp. 50, 51.

An otherwise apparently healthy man, æt. 20, was attacked by the following symptoms in the order mentioned: *left*-sided paralysis of the abducens, continuing for ten days and apparently caused by exposure to cold while sleighing. Six months later complete paralysis of all muscles provided by the motor oculi of the *right* side set in. No improvement, but instead, after two more months, intense headache made its appear. ance, and continued daily for several hours. A year and a half after the initial symptoms vision was suddenly extinguished on the *left* side. At the same time paresis of accommodation and swelling of the optic nerve, with atrophy, developed themselves. About six months later the patient had an attack of severe vertigo, followed immediately by paralysis of the left arm, to which

gradually total left-sided hemiplegia was added, as well as facial palsy of the same side. The periodical pains in the head ceased entirely. The right eye also then became blind, while hearing was impaired. Death did not take place till five years after beginning of the first symptoms.

Post-mortem.—In the left anterior fossa was found a dense tumor consisting of two lobes, and reaching from the processus clinoideus anterior to the foramen magnum and sideways to the os petrosum. A second tumor of the size of a walnut was detected under the anterior lower surface of the left hemisphere of the cerebrum. The microscopical appearance of the tumors is not mentioned. Optic nerve, chiasm and olfactory nerves were found to be atrophied.

Styptic in Phthisical Hemorrhages.

Jaccoud (*Hémoptysie apyrétique chez les tuberculeux. Mon. de la Policlinique*, 3, 1882) recommends the following in cases of hemorrhages in tubercular phthisis:—

℞.	Ergotin,		gr. xvj
	Glycerin,		
	Aquæ destillat,	āā	ʒj
	Aquæ laurocerasi,		ʒss. M.

A hypodermic syringe is filled with this solution, and, according to the severity of the case, from two to four such injections are made daily.

Clinical Thermometers.

The Second Annual Report of the Astronomer at Yale College states that the improvement in the manufacture of clinical thermometers in this country continues, and the thermometers he receives which are most misleading in their indications are those which come in from private practice, and which have been in use for a year or more.

These errors sometimes amount to 2°, which would render a clinical thermometer much more than worthless. He adds:—

"We have been much encouraged in this department of the observatory work by the cordial endorsement given to it by the medical press. There have been some suggestions made by gentlemen eminent in the medical profession, both privately and in print, concerning some new facts we should give in the certificates accompanying thermometers sent from here. The most important is contained in Dr. E. R. Squibb's interesting paper on clinical thermometers, read at the New York State Medical Association's meeting at Albany and refers to the testing of thermometers for sensitiveness. He notes the difference in time required for different thermometers to attain their maximum reading, owing to the varying thickness and shape of the glass in the bulb, and suggests some test be applied which shall give the observer the time required for each instrument to reach its maximum. We have considered this matter, but so far have not devised a simple test which sufficiently approximates the conditions met with in medical practice to be of service in this connection."

Introduction of Aliments and Medicines Through the Nasal Cavity.

Fernet and Martel (*Schmidt's Jahrb.* 1882, No. 1, p. 63) have made a number of experiments to demonstrate the possibility of introducing aliments and medicines through the nostrils.

For this purpose the patient is placed on his back, in the recumbent position, while the head and the upper part of the throat are permitted to fall somewhat backward. The gum hose of a common nursing bottle is then pushed into the posterior part of one nostril, and the fluid—either containing nutritive substances or medicine—slowly poured in. In consequence of the peculiar position of the body, the floor of the nasal cavity and the velum form an oblique plane, so that the fluid mentioned flows directly into the pharynx and induces swallowing. Generally, and especially if the fluid is poured in slowly, the expected result ensues with certainty, and in a manner by no means disagreeable to the patient; only when the fluid is poured in too rapidly, a few drops may find their way into the larynx, causing the well known irritating cough.

Fernet and Martel have employed this method successfully in persons in a comatose condition, in children suffering from tubercular meningitis, and even in newborn infants too weak to take the breast or the bottle. This method may also be successful to introdnce such medicines into the stomach which, in consequence of their bitter or nauseous taste, are rejected by the patient.

Créquy recommends, for this purpose, the introduction of a flexible gum tube (catheter). If this is pushed behind the velum, the possible reflow of the fluid, by the other nostril would effectually be prevented.

Martel reports two cases: one, where, in consequence of a fall on the head, severe concussion of the brain, with trismus and utter inability to swallow, set in, and the other, a case of pneumonia in a drunkard, the patient being totally unconscious. Here the medicines—calomel and

jalap in the first, musk and digitalis, in the second case—were successfully carried into the system by the method described, and though in consequence of their severity the cases ended fatally, the procedure itself achieved its object.

Vaginal Hemorrhage in a Newborn Child.

Dr. Josef Pollak, in Devecser, reports an interesting case in the *Wien. Med. Presse*, XXI, 27 p. 876. He observed in a female infant, four days old, a not inconsiderable hemorrhage from the vagina. The bleeding reappeared several times daily; after the third day the discharge assumed a reddish-brown, and later a chocolate color, and ceased totally when the infant was nine days old. At the same time there was noticed a swelling of the mammæ, and on pressure a milk-like fluid oozed from them, drop by drop. The latter symptom is rather common, while hemorrhage from the vagina in infants is exceedingly rare, but seems to possess much less significance than intestinal hemorrhage. The general health of the case just reported did not apparently suffer at all in consequence of the bleeding.

Ligature of the Innominate Artery.

It is reported, in the *Medical Times and Gazette*, that Mr. William Thomson tied the innominate artery of a man aged fifty years, the subject of subclavian aneurism. Mr. Barwell's ligature was used to secure the vessel. Up to the present time the patient is making satisfactory progress. The patient suffered from an aneurism springing from the third and second stages of the subclavian artery. Some months ago he refused to submit to any operation, and left the hospital. He, however, lately returned, the aneurism having increased in size, and then measuring three and a half inches in diameter at its base. Operation was again proposed, and was consented to; but pulsation ceased suddenly. This continued for twelve hours. During a week there were occasionally short cessations, but the tumor meanwhile enlarged, the skin became red, and it was determined to operate. The wound has entirely healed, with the exception of the opening left by the drainage tube; the pulse is 98, and temperature is normal; the tumor is smaller, absolutely still, and sensation is returning in the right arm, which had long been paralyzed by the pressure of the aneurism on the brachial plexus. Much interest is naturally felt in the result of this operation, seeing that of fifteen recorded cases only one recovered, the patient being a negro, operated upon by Smith, of New Orleans. In that instance there was severe secondary hemorrhage, and it became necessary to ligature the vertebral and internal mammary arteries.

Special Reports.

NO. VIII.—VENEREAL DISEASES.

SYPHILIS VS. CANCER.

The differential diagnosis between syphilis and cancer is oftentimes attended with much difficulty. In the *British Medical Journal* Dr. Thomas Drapes relates a case that well demonstrates the embarrassment with which the surgeon will be sometimes surrounded when endeavoring to differentiate between these two morbid conditions. The patient was a respectable married woman, aged 50. She began suffering from her throat, the first symptoms being pricking pains running through both sides of the throat. She experienced steadily increasing pain and difficulty in swallowing, so that only liquids could be consumed, and they would have to be held in the mouth and allowed to descend into the stomach drop by drop. She lost flesh and strength and was confined to bed. On entering the room one was immediately struck by the extraordinary fetor emanating from the patient, which possessed that peculiar pungent, stinking quality, so characteristic of cancer in its later stages. The back of the pharynx was thickly covered with purulent secretion. On examination with the finger a rugged, irregular mass was felt, occupying the back and right side of the pharynx; the surface was knobbed, hard and bossy. The age of the patient, the circumstances and the peculiar fetor indicated cancer, and a gloomy prognosis was made. Palliative treatment with iron was adopted, without benefit. Subsequently it was accidentally discovered that the patient had been treated two years before for a rash over her entire body, which went away after using medicine that she said "rotted her teeth." It also transpired that her husband had been treated for syphilis about a year before. Mercurial inunction was prescribed, and in a few days, along with it, three grain doses of iodide of potassium thrice daily. Immediate improvement commenced; in a week she could eat meat. The fetor and discharge rapidly and permanently disappeared; the gummatous infiltration steadily diminished, and perfect cure resulted.

SYPHILITIC PACHYMENINGITIS OF CEREBELLAR FOSSA.

Before the Medical Society of London (*Lancet*)

Dr. Broadbent related the post-mortem appearances in a case of paralysis of the right seventh, eighth and ninth nerves. There was a syphilitic history; after pain in the right occipital region, paralysis came on successively in the seventh, eighth and ninth nerves of this side. There was deafness, as well as facial paralysis; paralysis of the sterno-mastoid and trapezius muscles, with atrophy so complete, that these muscles had practically disappeared. There was also paralysis of the vocal cord. Paralysis and atrophy of the right half of the tongue came on while the patient was under observation. It turned out to be a case of syphilitic pachymeningitis of the right cerebellar fossa. When the tentorium was divided the right lobe of the cerebellum was found to be closely adherent to the dura mater, and the thickened membrane to have strangled the nerves at their exit by the foramina. This was the sole lesion, the medulla and fons being quite normal, as were all parts of the brain. Dr. Hughlings Jackson said that in most of these cases there is a history of syphilitic disease, although not in all; in one case where there was but little doubt of syphilitic disease during life, after death a cyst in the cerebellum was discovered, while in another case was found a glioma, involving the medulla and pons.

CRANIAL OSTEOPHYTES.

Before the same society, Dr. Radcliffe Crocker presented a case of congenital syphilitic osseous thickenings and enlarged spleen, in a male infant eleven months old. The patient was a seven months' child. The skin is sallow and waxy looking, but he is well nourished. There are symmetrical osseous thickenings on each frontal bone, about an inch and a half in diameter, commencing about an inch above the orbits, which are separated by a sulcus of the breadth of the finger. The anterior boundaries of the fontanelles are thick, but the posterior thinner than normal. There is no cranio-tabes. The spleen is much enlarged, extending two inches and a half below the ribs and measuring three inches across. Dr. Sansom pointed out that in the rachitic skull the margins of the fontanelles were shelving, and not thickened nodular prominences, as in syphilis.

SYPHILITIC PARALYSIS.

In the *Lancet*, Dr. Tuckwell reports the following peculiar and instructive case: The patient, a woman aged 30, was married and had had two children. The last pregnancy was twelve months prior to admission. No distinct history of syphilis could be obtained, but there were very strong reasons for suspecting that she had been exposed to the infection. She had never been ill before in her life, except with slight sore throat some fifteen years before. Upon rising in the morning of the day on which her illness began she felt perfectly well, but during the day had aching pains in her ankles and legs, and she noticed that her legs gave way when she tried to walk, so that she was unable to go up stairs at night. For the first week her hands and arms were unaffected, but after that time they gradually lost power, without any numbness or unusual sensations in them. She was well nourished; there was no muscular atrophy. Below the knees there was complete anæsthesia, both to tactile and painful sensations. It also extended above the knees, but was less marked on the outer side of the thighs. Over the region of the buttock she could feel quite well, the area of normal sensation joining that of anæsthesia, about the level of the great trochanter. The fingers of both hands were anæsthetic. The feeling in the palms was diminished. She could feel and localize fairly well on the backs of the arms. The patellar tendon-reflex was abolished, and there was no ankle clonus. The pupils were not dilated and reacted well to light. There was no reaction in the legs to faradization. The patient slept well, appetite good, temperature normal. The heart, lungs and other portions of the body were healthy. The urine was free from albumen, and she had perfect control over the sphincters. The loss of sensation gradually progressed. Three weeks after admission she had a convulsive attack which began with twitching of the right hand and right side of the face, and which passed off, leaving the legs rigid. This rigidity disappeared the next day.

Ophthalmoscopic examination showed well marked optic neuritis in the left eye, clouding of the retina around the disc and swelling of the disc itself. The arteries could scarcely be seen; the veins were large. Right eye: the outer half of the disc was obscure, the inner half dull; veins large, arteries indistinct. She was treated with large doses of iodide of potassium and galvanism, and it is recorded that after eight months her condition has improved much in every particular, and the improvement is continuing.

SYPHILITIC DEFORMITY OF THE TEETH.

Before the Odontological Society of Great Britain (*Medical Times and Gazette*) Mr. Ackery showed two cases of unilateral syphilitic deformity of the upper central incisors; in each case the left central showed the typical notch while the right was normal, which possessed some interest

as an unusual occurrence, since nearly all syphilitic manifestations are bilateral. Mr. Coleman presented a model of a case in which there were two supernumerary centrals of distinctly syphilitic type, while the proper centrals, which were coming down within the arch, were well formed. The patient presented other evidences of syphilitic taint. Before a meeting of the same Society (*British Medical Journal*) Dr. B. W. Richardson read a paper on "*The Causes of Dental Caries, Constitutional and Local.*" For some years he has kept a record of the condition of the teeth of all patients that came before him. He found that, of over four thousand persons, of both sexes and all ages, over eighty per cent. were affected more or less severely with dental caries; while it was rare to meet with a person in whom both sets of teeth were altogether free from the disease. The two general causes which he believes to be chiefly responsible for this condition of affairs are hereditary syphilis and dyspepsia. With regard to the first, he quoted the statements of Professor Gross and Dr. Holland, respecting the proportion of the adult population of the United States and Great Britain, respectively, who acquire the primary disease, estimated in each case at about one in eight. Contracted in adult life syphilis does not materially affect the teeth; but the hereditary constitution bequeathed by it is undoubtedly indicated in the next generation by disease of the teeth, and by a constitutional condition in which caries is readily developed. It is hard to say whether dyspepsia should be placed before or after syphilis in point of importance.

ASSOCIATION OF TABES DORSALIS WITH SYPHILIS.

In the course of an interesting article on this subject, by Dr. Thomas Buzzard, in the *Lancet*, he says that when writing upon syphilitic affections of the nervous system, in 1871, he included progressive locomotor ataxy among the nervous affections belonging to the tertiary stage of syphilis; but since that time circumstances have so altered his views as to make him now entertain some doubt as to the relationship of cause and effect in these two diseases. His reasons for becoming skeptical he gives as follows:—

"Erb, in a recent publication, says that out of forty-four cases he had met with a history of syphilis in twenty-seven. Out of fifty-three cases of my own, a probable history of syphilis is noted in twenty five, but I have reason to think that this figure may not accurately represent the actual proportion, my notes of several of the cases being imperfect. Now, if we add together the statistics of Fournier, Erb, and myself, we shall find that in seventy-six cases out of one hundred and twenty-seven, or in 59.8 per cent., there was a history of syphilis.

"It is clear that coincidence is not sufficient of itself to establish anything like a necessary relation. It might turn out, for example, that a relation of the following kind existed: Tabes dorsalis was formerly supposed to be due to sexual excesses; the individual addicted to sexual excess would be, *cæteris paribus*, more exposed than another to the chance of syphilitic infection, and the misfortune attributed to the latter might really be due to the former. I do not support this view; on the contrary, I do not think there is any ground for believing that sexual excess is, at all events, a frequent antecedent of tabes, but I mention it as an illustration of one mode in which there might be a coincidence in the occurrence of syphilis and tabes without any real association of cause and effect. There may be others.

"It is necessary also to bear in mind another very possible source of fallacy. There is often great difficulty in ascertaining the date of the earliest symptoms of tabes. There may have been some slight flying pains which have left little or no mark in the recollection of the patient, and in nine cases out of ten have been set down by him to rheumatism. Yet these pains, usually the earliest evidences of tabes, may have occurred *before* he became infected with syphilis. In the case of a gentleman whom I have at present under occasional observation there were neuralgic pains in the head some years before he acquired syphilis. Who knows whether these did not depend upon sclerosis of the deep root of the fifth nerve, as is probably the case in the patients whom I showed at a recent lecture? On this account I do not think my statistics are to be depended on, as showing with any certainty the proportion of cases in which syphilis was acquired before the earliest symptoms of ataxy, and it is evident that the same objection may possibly apply to the figures collected by others. The discovery made by Westphal, that absence of patellar tendon-reflex is a very early symptom of tabes, will help us greatly in the future in regard to this subject, but it necessarily throws no light upon the date of origin of those cases the notes of which were taken before his all-important observation became common knowledge.

"The position of tabes in regard to syphilis is peculiar in another respect. Affections of the nervous system which owe their origin to syphilis are not, as such, distinguishable in any very evident manner from diseases unconnected with such infection. The hemiplegia which results from thrombosis of a cerebral artery affected with syphilitic disease follows the same course as hemiplegia consequent on thrombosis of a cerebral artery thickened by atheroma. Syphilitic new formations in connective tissue bring about symptoms depending on lesion of nervous structure, such as might be referable to growths of any other kind. But there are two points especially which frequently afford strong presumptive evidence as to the syphilitic nature of a certain affection. In the case of lesions referable to thrombosis of a cerebral artery there is the age of the patient. Should this be much below that at which degenerative changes may be reason-

ably looked for in the arterial system, there being at the same time no evidence of changes in the heart or kindeys, I think we may almost certainly refer the arterial thickening to syphilis. So also in regard to growths. As a matter of experience, it is certain that almost all cases of marked paralysis of single cranial nerves (I exclude here the incomplete and transitory paralysis seen in tabes) are due to syphilis. When along with this are conjoined symptoms which can only be referred to in the existence of another distinct lesion (one causing—*e. g.*, hemiplegia, monoplegia, or paraplegia), the evidence is greatly strengthened. It becomes, indeed, so strong, and the chance of exception due to the presence of tubercle or cancer is practically so small, that, in the absence of the strongest corroborative evidence of the latter diseases, we should be culpable in treating the case otherwise than as one of syphilis.

"But in tabes the circumstances are very different. Take, for example, the question of age. If we compare the ages of tabetic patients in whom inquiry elicits a history of syphilis with those in which this element is wanting, we are not struck by any marked constast. When we meet with the case of a young man of twenty or thirty years of age who has hemiplegia apparently resulting from cerebral thrombosis, and in whom there is no history of rheumatic fever, heart or kidney disease, we know at once that his disease is almost certainly the result of syphilis. We are struck by the fact that he is suffering from an affection brought about by disease of his cerebral arteries. The more ordinary cause of such disease is the atheromatous thickening which comes in association with other degenerative changes brought about by agedness. Syphilis induces changes in the arterial coats, which lead to a precisely similar result. The indications are simple enough. But in tabes we are left without aid from this question of age. The disease is one commonly of adult life, which most often commences, so far as we can judge, in the period between maturity and middle age, and whether there is a history of syphilis or not, the large majority of patients are about this time of life.

"There remains the question of sex, consideration of which may help us a little. My personal experience is that only 10 out of 100 patients suffering from tabes belong to the female sex. Gowers thus refers to the point: 'Whatever it is which determines the occurrence of locomotor ataxy in men and very rarely in women, and which must be regarded as one of the causes of ataxy, operates in conjunction with syphilis in confining the syphilitic ataxy also to men. Other consequences of syphilis occur in women as well as in men; ataxy in men almost exclusively.' Some years ago, in view of a coming discussion on syphilis at the Pathological Society, I tabulated 100 cases of disease of the nervous system dependent, so far as could be determined, upon syphilis. From this list all cases of tabes were excluded. Sixteen out of the 100 patients were females, but I have since had reason to think that the proportion of females affected with disease of the nervous system consequent upon syphilis is far greater than this. Again, the occurrence of tabes in females of good social standing is surely of extraordinary rarity. Are females of this class equally exempt from syphilitic affections of the nervous system of a kind which is generally recognized? I am sure that they are not, and that in this respect there is a very striking contrast.

"If tabes be very frequently of syphilitic origin, how is it that females, who bear their fair share of other diseases of the nervous system of specific origin, furnish only ten per cent. to the ranks of the former disease?

"While it appears to me incontestable that there is a remarkable frequency of association between syphilis and tabes dorsalis, I do not think, all things being considered, that the time has yet arrived for us to draw safe inferences as to the precise nature of the relation."

TREATMENT OF SYPHILIS.

Dr. G. H. Fox read, at the New York Materia Medica Society, a paper on the treatment of syphilis, in which he lays down the following propositions:—

1. Mercury is the most valuable curative agent of which we have any knowledge. The positive results which follow its employment are such as to convince any competent observer as to its efficacy. 2. It is, however, an overrated remedy; for, while it will lessen the manifestations and shorten the natural course of syphilis in most cases, it will not always produce a speedy and beneficial effect, as generally believed. 3. Patients would derive great benefit if more value were attached than at present to hygienic measures, instead of relying solely on the specific action of mercury. "Remedial agents often acquire a fictitious value by reason of the fact that patients improve during their administration. We know that mercury is not inert, and have ample proof that it can accomplish a great deal. The improvement which takes place in patients is not wholly the effect of the mercury, but is in great measure due to the *vis medicatrix*." 4. Mercury is not essential to the cure of syphilis. The disease has a tendency to run its course, and in the majority of cases is far less malignant than it is supposed to be. If the patient is of sound constitution and the infection is mild, it usually runs its course without injury to the health. "It may be said that such patients will suffer more from severe lesions in later years. I believe that these patients are as thoroughly cured as those who have taken mercury." 5. The internal administration of mercury is preferable to its use in the form of inunction, vapor-baths, etc., in all cases of constitutional disease. 6. The dose of mercury usually given is too large. "In my own experience I have never seen any benefits result from the combination of various salts of mercury, as recommended by Bumstead, or by the frequent change from one preparation to another." 7. The duration of mercurial treatment should vary according to the character of the case. There are cases of mild and cases of severe syphilis. Mild syphilis does not require mercurial treatment. "There are cases which demand two, three, or perhaps five years of treatment. But it is utterly impossible

to fix a certain time as the duration of treatment in all cases. . . . . My own practice is to give mercury in every case during the existence of any symptom of the disease, whether it occurs early or late. In the early period I continue it for six months after the last symptom has yielded ; I then stop it, and await further developments. If the symptoms reappear, I revert again to mercury, and continue perhaps for two or three months after the disappearance of the latest symptom. In late syphilis I give mercury to subdue any growing symptom, and then stop."

Of iodide of potassium, Dr. Fox has a high opinion.

"I believe that in the early stages of syphilis it is an invaluable therapeutic agent. In the stage of efflorescence, I must admit that the drug has little or no effect upon the cutaneous manifestations. In ulceration of the tongue and mucous patches, I have seen good results following its use, when mercury had been given for several weeks, with no effect. In the cure of cephalalgia and arthritic pains, associated with the first outbreak of syphilis, it displays its remarkable power. Of its great value in late syphilis, I need not speak. Its power is often exerted in a most brilliant manner when its administration is preceded by a course of mercurials. The iodide is best prescribed in an aqueous solution, a cubic centimeter containing one grain. It is a remedy which no patient ought to be compelled to take for a great length of time. It does its work quickly or not at all, and when unnecessarily continued, is sure to do harm. For every case of syphilis that I have seen benefited by immense doses of the iodide, I have seen at least two in which large doses have done harm. I do not deny the value of large doses in certain cases, but I protest against the continuance of large doses in chronic syphilis. When there is dyscrasia and a weakened state of the digestive organs, I have great faith in the iodide of starch."

"Iron in the treatment of syphilis is of very great value. It deserves to be ranked with mercury and the iodide. Its power to combat the anæmia which is invariably present in the early stage of syphilis renders it a most invaluable adjunct of mercury. I should prescribe it for a patient presenting chancre or initial lesion, and give it as a routine in the secondary lesions. It tends in a slight degree to lessen the probability of subsequent manifestations. In the weakened state of the system, asociated with late syphilis, the value of iron is too well known to require mention ; but in the early stage of the disease its value seems to be unknown or unappreciated. I employ the tincture of the chloride in daily doses of ten to fifteen drops. Cod-liver oil is a remedy which is not unfrequently of service. When an individual with a strumous diathesis is affected by this disease, its symptoms are apt to be severe and prolonged, and amenability to mercury is greatly lessened. In these cases the use of cod-liver oil alone, or in connection with iron, is likely to be productive of good results. In late syphilis of an ulcerative type I have repeatedly seen mercury fail to do good at first, while after the administration of the oil for a month or two it has accomplished all the good that could be expected from its use."

In the discussion which followed, Dr. Sturgis observed that although many cases of syphilis will get on very well without mercury, there is a risk for the future incurred by not giving it, for it is impossible to say whether the case will turn out well or ill. He has a much higher opinion of inunction as a means of administering mercury than Dr. Fox ; but he believes that the value of iodide of potassium as a curative agent has been much overrated, although it forms an excellent adjuvant. He has found the iodide of starch so unsatisfactory that he has abandoned its use. As regards the combined use of mercury and the iodide, he believes the effects attributed to the iodine are really due to the mercury, the iodine seeming to favor the solution of the mercury and render it more active. Thus, after a course of mercury and iodine, slight ptyalism and diarrhœa may be produced, while no such results had followed when mercury had been used alone.

Dr. Johnson agreed with Dr. Sturgis in believing that the iodide renders mercury which had remained inactive in the system for a time much more active. It acts in an analogous manner with regard to lead, in poisoning from which it is not infrequently administered. By prolonged use it helps to eliminate the lead, although the first stage of its action is to increase the activity and poisonous effect of this.

Dr. Castle, in using the iodide, either alone or with mercury, generally in the later stages of the disease, has had the objects in view of inducing the absorption of pathological products, and the relief of the pains which occur at the later stage of the malady ; and he does not believe that iodine in any form exerts any other specific effect. As soon as it is eliminated its effect ordinarily ceases, and to secure this it must be continued for some time. He agrees with Dr. Fox regarding the different ways different persons are affected by symptoms, and has met with many very mild cases : but he has treated these also with mercury, with a view rather of preventing subsequent developments than because their condition at the time required active medication. In such cases, as in those that are more severe, he has combined it with the use of tonics, and as thorough an attention to hygiene as practicable, believing this quite as important as any specific treatment.

Dr. Morrow observed that, in the general habit of treating syphilis with mercury and iodine in all its stages, he had also treated many cases without mercury, and had been unable to detect any

difference in the evolution of secondary symptoms in either set of cases. He also pointed out the fact that a much longer course of mercurial treatment (at least four years) is now deemed to be required for protection from subsequent manifestations than was considered necessary some twenty-five or thirty years ago, when a course of six or twelve months was regarded as sufficient. This would seem to show a growing lack of faith in the curative properties of mercury.

Correspondence.

Heat Fever.

Ed. Med. and Surg. Reporter:—

As the hot weather is now upon us, and the evil effects of high temperatures will have to be met and combated by the profession, I have thought the history of the following case of (shall I call it?) heat fever, might be interesting to the readers of your journal:—

August 27th, 1881, D. called upon me at my office, and asked me to go and see his child, a girl, aged three and a half months, in consultation with Dr. X. D. said his child was in convulsions and that he did not think it would live an hour. I went with him at once, and upon my arrival I found the child in convulsions, wrapped in a big shawl, mustard plasters on its back and feet, in a very small room, crowded with distressed and sympathizing neighbors and friends, a big fire in the cook stove in the kitchen and the temperature of the little sufferer 108° F.

Although the windows of the room were hoisted, the air was very hot and oppressive. The thermometer indicating a temperature of 90 to 100° in the shade. I ordered the child to be taken out of the room on to the porch, stripped of all its clothes, the mustard washed off its back and feet, and its body wrapped in a single layer of muslin, wrung out of cold water, to facilitate the rapid cooling of the child. I directed it to be fanned constantly. On the porch Dr. X. tested the temperature of the patient and found that it was 107° by his thermometer. As the porch adjoined the kitchen, where the hot stove was, I directed the child to be taken into the yard, in the shade of the house, and that cloths saturated with alcohol be substituted for the cold water applications, as it tended to more rapidly cool the patient. All this time the child was working in convulsions. The advantage of ordering the baby into the yard was apparent to all, viz: cooler and purer air, and a better opportunity for those sympathizing friends to observe all that was going on, to satisfy their curiosity without in any way adding to the discomfort or peril of the little sufferer. Steadily persevering in the application of the cloths saturated with alcohol, and the fanning, I had the satisfaction of seeing the temperature of the child gradually fall to 96°, and, *pari passu* the subsidence of the convulsions, until, when the temperature had fallen to 96°, the convulsions had altogether ceased. I then discontinued the applications and the fanning. The temperature soon rose above the normal again, and as it rose the symptoms of the recurrence of the convulsions reappeared. By reapplying the cloths saturated with alcohol, and by fanning, to increase the rapid evaporation of the alcohol, and thereby more rapidly reduce the temperature, the convulsions were controlled, and the heat of the body kept about normal. Attention to the diet and remedying the irregularities of the digestive organs, finally restored the little patient to comparative health, although she is still unable to walk.

H. Nye, M.D.

Enon Valley, Pa.

Death from Morphia without Narcotism.

Ed. Med. and Surg. Reporter:—

I was called, April 28th, at 8 A.M., to Mr. H., aged 27, married, occupation conductor. I found him vomiting violently, not able to retain the smallest quantity of anything on his stomach. Frequent discharges from the bowels, cold extremities. Pulse 160. Respirations 24. Suppression of urine. Pupils strongly contracted.

As he had, a month previous to this, taken morphia with suicidal intent, and suffered from the same symptoms, I suspected an overdose of morphia again, and upon inquiry found that he had taken twenty grains of morphia the evening before, which did not produce sleep. Nor was there either narcotism or delirium throughout the case. There was no change whatever in any symptom except increased heart action and cyanotic appearance of the extremities. He died 4 P.M. the 30th. It is not necessary to give my treatment in the case; suffice it to say I used neither atropia nor any preparation of belladonna. On account of the peculiar symptoms some of the medical gentlemen who were with me in the case suspected other poison than morphia. Accordingly we removed the stomach May 1st. Three weeks later it was sent away for analysis, which threw very little or no light on the matter, as no poisonous material of any nature could be detected.

I have frequently been called to patients who were suffering from large (but not fatal) doses of morphia, with very little narcotism, but have never met with a case before which resulted in death without narcotism, diminished respirations, and other symptoms generally produced by overdoses of opium and its preparations.

Stanbury, Mo. W. C. Rose, M D.

News and Miscellany.

Darwin's Death.

From a speech which Virchow made last month, in a meeting of the Berlin Anthropological Society, in reference to Darwin's death, we glean the following concerning the last hours of the great naturalist:—

Darwin died from an affection of the heart, from which he had been suffering for years, but which, till a few days before his death, had not been considered as dangerous to life. Until two

weeks before his death Darwin used to leave his house and take a walk, notwithstanding he commenced to feel very weak. He still continued his favorite work, and the day before his death he examined a plant. About half-past eight o'clock in the evening he was carried to his bedchamber, where he sat up some time, reading. Toward midnight he was seized by a severe spasm, which, notwithstanding the most attentive treatment, caused his death at four o'clock in the afternoon.

Milk Sickness.

The mystery which surrounds milk sickness cannot be said to have been removed by the late investigations of Dr. James Law, published by the National Board of Health. He, however, believes that it is characterized by the presence in the blood of a species of spirillum, resembling that seen in relapsing fever. The germ is probably derived from drinking water, or from the surface of vegetables, as certain wells are said to infect with certainty, and the disease has been repeatedly produced by feeding upon particular plants (*Rhus toxicodendron*, etc.) That these plants in themselves are not the pathogenic elements, is shown by their innocuous properties when grown in places out of the region of the milk-sickness infection. Dr. Law thinks it altogether probable that here, as in malignant outbreak, we are dealing with a micro organism which has developed pathogenic properties, and which can be produced indefinitely in the bodies of living animals.

We should be glad to print further observations on this disease from some of our Western readers.

American Dermatological Association.

The Sixth Annual Meeting of the American Dermatological Association will be held at Newport, R. I., on August 30th, 31st, and September 1st.

Embalming.

The principal Italian embalmers keep their special processes a secret, although the chief steps are well known. The process of embalming is stated to consist of five steps. First, cold water is injected through the whole circulatory system until it issues quite clear; this may take as long as five hours. Alcohol is then injected, for the purpose of abstracting all the water from the body; this is followed up by the injection of ether, to dissolve out the fatty matter; this injection is carried on for several hours—in thin subjects for two, in very fat ones for even so long as ten hours. After this a strong solution of tannin is slowly injected, and full time is allowed for its soaking into all the tissues; this takes from two to five hours. Lastly, the body is exposed, for from two to five hours, to a current of warm air, which is previously dried by passing it over heated chloride of calcium. The body can then be preserved for any length of time without undergoing change, and is as hard as stone.

Items.

—The *Canada Journal of Medical Science* says:—

"In a curious old work, published in 1824, entitled 'Nugæ Chirurgicæ,' by Wm. Wadd, Esq., F.L.S., we find the following account of Cordus, a physician of eminence, who died in 1535: 'Cordus, who was accustomed to receive his fees only at the termination of his patient's disease, describes, in a facetious epigram, the practitioner at three different times, in three different characters:—

'Three faces wears the doctor: when first sought,
An angel's; and a god's, the cure half wrought;
But when, that cure complete, he seeks his fee,
The devil looks then less terrible than he.'"

MARRIAGES.

BULLARD—SUEDMEIR.—On Wednesday, June 21st, 1882, at the residence of the bride's parents, by Rev. T. T. Holton, of Lincoln, Ill., Dr. Frank B. Bullard and Miss Kate Suedmeir, both of Chestnut, Ill.

DALSEN—SMITH.—On July 8th, 1882, by the Rev. R. F. Alsop, Charles W. Dalsen, M.D. and Laura V. Smith, both of this city.

DENNIS—LODER.—In this city, on Tuesday morning, June 20th, at the residence of the bride's brother, Dr. Percival E. Loder, by the Rev. Achilles L. Loder, of Gunnison, Colorado, Dr. D. N. Dennis, of Killingly, Conn., and Miss M. Camilla Loder, of Philadelphia.

PROPER—ANDRE.—June 1st, 1882, at Mr. Wesley Cramer's, near Franklin, Pa., by Rev. T. D. Stewart, Dr. Walter J. Proper, of Wallaceville, Pa., and Miss Clara A. Andre, of Hendersonville, Pa.

RIMER—HESSON.—In West Philadelphia, June 21st, by Rev. J. Addison Henry, D.D., J Thomas Rimer, M.D., of Clarion county, Pa., and Carrie Adele Hesson, of West Philadelphia.

SIMPSON—PRATT.—On Tuesday, May 23d, by Rev. Andrew Lees, George W. Simpson, M.D., of Mill Creek, Huntingdon county, Pa., and Miss Hattie L. Pratt, daughter of Henry M. Pratt, Esq., Philadelphia, Pa.

SNOW—LOCKWOOD.—July 6th, 1882, at New-Canaan, Conn., by the Rev. Joseph Greenleaf, Dr. Gustave N Snow, of Hartford, Conn., and Josephine H., daughter of John W. Lockwood, of Philadelphia, Pa.

SWIFT—JACOBS.—In New York, on Tuesday, June 13th, at All Souls' Church, by the Rev. Russell N. Bellows, Marie Aborn, daughter of the late Samuel J. Jacobs, and Dr. William J. Swift.

VREELAND—LOCKWOOD.—At Westtown, N. Y., June 8th, by the Rev. R. Bowen Lockwood, assisted by the Rev. J. B. Fisher, J. S. Vreeland, M.D., of the above-named place, and Miss Kate Lockwood, daughter of the officiating minister.

WEBER—CASSELBERRY.—On Thursday evening, May 25th at the St. James' Perkiomen Church, by Rev J. L. Heysinger, Dr. Mathias Y. Weber and Miss Ann Rebecca Casselberry, both of Evansburg, Montgomery county, Pa.

WEISMANN—WISNER.—On Saturday, July 1st, 1882, by the Rev. Chas. Frincke, of Port Richmond, S. I., Francis H. Weismann, M.D., and Louise Wisner, of Chicago, Ill. No cards.

DEATHS.

FOSTER.—Dr. Nathaniel Foster, an old and eminent physician of Cincinnati, Ohio, died, July 16th, of paralysis. He was a brother-in-law of the late General W. H. H. Lyttle, and was well known throughout the medical fraternity of the Union.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

SUDDEN DEATH IN TYPHOID FEVER.

BY M. BLACHEZ,

Physician to the Hôpital Neckar.

Gentlemen: This accident is by no means rare. Already more than one hundred observations are on record, and yet, until within the past fifteen years, this mode of termination has hardly been noticed in French works on the subject. Chomel and Andral each mention one case, but without devoting any particular attention to the subject.

In 1864 Zenker (of Leipsic), in a memoir on the muscular lesions observed in typhoid fever, insisted on the degeneration of the muscular fibres of the heart, a condition already noticed by Lænnec and Louis, and particularly by Stokes, in malignant typhus. The subject had then attracted little attention, until M. Dieulafoy made it the subject of his thesis, in 1869.

Since then the researches have been numerous, and the same year appeared the work of Hayem on the muscular alterations in febrile conditions. Among the other works relating to the subject are the memoir of Laveran, in the *Archives de Médecin* for 1871; several articles by Liebermann which appeared in the *Gazette des Hôpitaux* in 1877; the thesis of M. Tambareau and that of M. Rabère (1878), in which sixty observations are analyzed. All the necessary indications may be found in a memoir by M. Huchard, which appeared in the *Union Médicale*, in 1877; in this work all the theories brought forward to explain the sudden death are analyzed and discussed.

I have been led to study over the literature of the subject by the observation of a case where I suffered a sad surprise.

The fatal termination in this case supervened under somewhat different conditions from those usually observed. We will give the observations in detail, and end by certain considerations suggested by it regarding the mechanism of sudden death in typhoid fever.

Obs.: Mme. X., thirty-five years of age, tall and thin, delicate while a child, but enjoying fair health since her tenth year. She has had three children, of whom two are living and in good health. She is in comfortable circumstances, living in the country. On Feb. 22d she suffered from slight malaise attributed to a cold contracted at the theatre.

There was slight fever, with the ordinary symptoms of gastro-intestinal derangement. No benefit was experienced from an emetic, and slight diarrhœa supervened.

Notwithstanding her slightly febrile condition, Mme X. was able to preside at a dinner of twenty persons on Feb. 27, and partook, without nausea, of light food.

On the next day, however, the diarrhœa was more troublesome, the matters passed being slightly tinged with blood; there was also slight griping. This diarrhœa very soon ceased under the influence of treatment. After March 2d there were three stools daily, of almost solid consistence and dark colored.

The pulse oscillated between 84 and 92 per minute; the temperature never went above 100° C., in the evening and fell in the morning to the normal standard. There was no pain on pres-

sure over the abdomen, no meteorism and no spots.

The tongue was red and the papillæ prominent; no râles in the chest.

Notwithstanding that the general symptoms did not seem to be of great gravity, the patient complained of being excessively feeble. She was very much depressed in mind and dreaded a fatal termination. She refused any sort of substantial alimentation.

He first considered it a case of gastro-intestinal catarrh, prolonged and aggravated by the dinner of February 27th, but on March 4th a few cuticular, rose-colored spots appeared on the belly. There was on several occasions very slight epistaxis. The diagnosis was no longer doubtful, and extract of quinquina, in potion, was ordered.

On March 5th she passed a good day, was able to take some light soups and milk, and remained in a pleasant frame of mind all day, the temperature remaining at 100.4°. On the morning of the 6th she woke about seven o'clock, after a tranquil night, and told her husband that she felt well but very weak. She asked for a glass of milk, and hardly had it swallowed when she complained of sickness at the stomach and desire to use the stool. It was brought to her and she was just about to use it when she fell back on the bed, and died without a struggle, after a slight contraction of the lips.

Every means of resuscitation were employed without success; the heated hammer was applied and energetic frictions with mustard over the entire cutaneous surface.

Death was instantaneous and without the occurrence of any apparent hemorrhage.

This was evidently a case of death by syncope; the hypothesis of an embolus, which first presented itself, was untenable, as there had been no dyspnœa or apparent asphyxia.

Comparing this case with others of the same kind contained in the works we have mentioned, we remark many points of similarity, but some also of difference.

In the first place, in most of the cases here recorded, where sudden death supervened, it occurred during the period of convalescence. It is at this period, when the disease is supposed to have terminated and the patient on the road to definitive cure, that death brutally supervenes to destroy the best founded hopes.

There is one observation only recorded by Liebermann where death occurred on the sixth day. In this regard our case differs from those ordinarily observed, for it is impossible to carry the debut of the malady further back than February 22d, and it was on March 6th, that is, on the twelfth day, that death supervened.

We observe that the authors concur in the opinion that these sudden deaths seem to supervene chiefly in the milder forms of the disease. This circumstance is habitual but not absolutely constant. From this point of view it would be difficult to meet with a milder case than the one we have reported. The temperature, observed with care, was never higher than 100.6°; the patient was able a few days after the début to preside at a dinner which lasted two hours, and the very day preceding her death the general condition was so good and she recovered her appetite so well that we were inclined to believe ourselves in presence of one of those abortive forms of typhoid fever observed in acclimated subjects living under good hygienic conditions.

The rather varied explanations given for the occurrence of sudden death in typhoid fever, and which have been so well discussed by M. Huchard, may be ranged under three principal heads: 1st. The theory of reflex action (Dieulafoy); 2d. That of cerebral anæmia (Laveran and Bussard); 3d. The theory of myocarditis (Zenker); that of myocarditis with proliferating endarteritis (Hayem).

In the first theory the reflex action would have as point of origin the intestinal lesion. The excitation is transmitted through the sympathetic nerve to the cells of the medulla and bulb. There it is transformed in motion, following sometimes the course of the pneumogastric, sometimes that of the other respiratory nerves, whence the arrest of the respiration or of the action of the heart.

This ingenious theory, based, according to the author, on physiological and clinical facts, is with difficulty sustained against the objections brought forward by M. Huchard.

In effect, according to this hypothesis, death should correspond with the period when the lesions are most marked, and not with that of their reparation. Syncope again is not observed in certain maladies where the nerve filaments of the sympathetic are seriously inflamed, as in peritonitis and dysentery. Sudden death has been frequently observed in typhus fever, when the intestinal lesions were wanting. For these reasons the hypothesis of reflex action, having its origin in the intestines, is, at least, insufficient of itself to explain the occurrence of sudden death in typhoid fever.

As regards the theory of cerebral anæmia, it does not account for the persistence or gravity of

the syncope in typhoid patients. Cerebral anæmia exists in many cases of marked cachexia where syncope succeeds on syncope without causing death.

It is well known, also, that the bulb and middle brain (mesocéphale) which have so direct an influence on the circulation, conserve their functions in the most marked cases of encephalic anæmia, on account of the very free vascular anastomosis of blood vessels existing in these portions of the brain substance.

The very great importance of the muscular lesions in the various fevers, particularly in typhoid fever, cannot be contested.

Hayem has shown how much this fatty, granular degeneration, studied by Zenker and Waldeyer (1864 1865), is promoted by a peculiar alteration of the blood vessels, which he has made known under the designation of proliferating endarteritis; this endarteritis causing the obliteration of the small arteries supplying the muscles of the heart itself, through the production of small thrombosic clots.

The principal objection brought forward against this theory is the fact that the cardio-vascular alteration described was wanting in several cases where it had been sought for with the greatest care.

M. Hayem affirmed, it is true, that he has in all cases found this alteration of the muscular fibres of the heart in cases of sudden death in typhoid fever. But it should be remarked that in the cases of variola where MM. Desnos and Huchard found analogous alterations, sudden death is much more rare than in typhoid fever; a fact due, perhaps, to the relatively short duration of smallpox.

We have not yet spoken of the thrombi or emboli found in analogous cases. The cardio-vascular degeneration and the peculiar state of the blood, evidently are of importance in the production of these coagulations; but they are far from being constantly found, and kill rarely by syncope, but rather by asphyxia, more or less rapid.

It may be concluded from this summary exposition, that the anatomical explanation of sudden death in typhoid fever is yet far from being satisfactory. There is no reason to believe in any one exclusive theory. M. Huchard is of opinion that the anæmia of the brain, taken in conjunction with the degeneration or simply ischæmia of the heart, will explain the occurrence of this symptom in most cases. Whatever the theory, is it not remarkable to observe these fatal syncopes supervene in cases so different from a clinical point of view?

If the period of convalescence seems to be that of predilection for these sudden deaths, it is none the less true that these symptoms are observed more frequently in mild than in more serious cases. Or, it would seem that the various degenerations noted as causes of sudden death should be much more marked in subjects worn out by a long morbid process and all the symptoms incident thereto.

And yet the patient in our observation was in excellent health twelve days before her death. The fever was exceptionally mild. It is difficult to suppose the existence of any advanced cardiac alteration in a woman who had always enjoyed good health, and who, during her short illness, had presented no trouble of the circulation except feebleness of the pulse, but without any intermittence or irregularity.

This intermittence of the pulse with tendency to syncope had been remarked in many cases as precursors of sudden death. We were struck by the extreme discordance between the benign and almost apyretic malady and the extreme lassitude, pallor, and in fact, almost collapsed condition of the patient.

On this account, from the first days, we renounced every form of debilitating treatment, and administered wine, quinine and coffee.

This conduct is recommended by all the authors who insist on the employment of every possible means to sustain the strength of the patient.

We were very far indeed from expecting, with but just the symptoms ordinarily observed in nervous impressionable subjects, the sudden and, as it were, brutal termination, supervening in a young, vigorous and long acclimated patient, living under the best possible hygienic conditions.

Communications.

THE LATE EPIDEMIC OF CATARRHAL FEVER IN PHILADELPHIA.

BY HUGO ENGEL, A.M., M.D.

Since the beginning of March of this year our city has been visited by one of the severest epidemics of catarrhal fever that has ever played havoc among the sedate inhabitants of the Quaker City; severe less on account of the number of its victims—death being generally caused by that fell destroyer and boon companion of influenza, pneumonia, or by the disease attacking the aged and those enfeebled by chronic ailments—but severe on account of the tenacity with which the *grippe* held on to the banks of both Delaware and Schuylkill, and on account of the ever vary-

ing symptoms under which this baneful complaint chose to manifest itself.

While one person, when suffering from this disease, would sneeze and sneeze, till his stock of handkerchiefs was exhausted, another complain of intense headache, a third of a stitch in the side, a fourth of an irritable cough, a fifth of pain in the stomach and nausea and vomiting, a sixth, perhaps, of disturbance in respiration and restlessness at night, they all very soon experience certain symptoms alike: fever, with an increase of temperature to 102°–104½° and an indescribable weakness, which seemed to befall the mental faculties as well as the motor impulses and the muscular system, while the afferent nerves were wide-awake and carried impressions with a rather painful vigor to the general centre of common sensation. The fever would occasionally commence with chilly sensations, and mostly reach its acme within two or three days, and usually continue at the height gained, with slight morning remissions in favorable cases, till the beginning or end of the second week, when more or less defervescence would indicate the anxiously looked for but frequently tedious convalescence. The general debility set in very early, and twenty-four hours after the appearance of the initial symptoms an apathy could be observed in the patients, which rarely shows itself so early in any other disease —indigestion from over-indulgence in not strictly temperate drinks perhaps excepted. Gloomy forebodings, occasional delirium, sleeplessness, were so many indications of the disturbed condition of the brain, while the often most intense headache, the severe neuralgia, and the not less painful hyperæsthesia, showed the irritable state of the sensory nervous system. In the vast majority of cases the progress of a poisonous substance along the mucous membrane of the whole respiratory tract could, during the course of the disease, be plainly traced; mostly beginning with irritation of those fibres of the fifth nerve that spread over the Schneiderian mucous membrane of the nose, occasioning sneezing and discharge of mucus from that prominent organ; this was followed rapidly by a mild sore throat, which in turn was succeeded by coughing, and the careful auscultator could frequently hear the mucous and dry râles becoming smaller and smaller from day to day, till a subcrepitant râle left him in doubt if it were not crepitation signifying the engorgement which generally denotes the approach or the first stage of pneumonia. This complication, as we in several epidemics of catarrhal fever had opportunity to note, may be of a threefold character. In the one we have only the subcrepitant râle, then a feeble bronchovesicular murmur over nearly one whole lobe (always the lower) of one side, while on the opposite side the respiration seems harsh, almost puerile in character; the clearness on percussion over the spot of feeble breathing is slightly impaired, but no further alterations are observed except a gradual return to the normal sound, accompanied by free expectoration. It always seemed to us as if in these cases exudation collected in the middle-sized and finer bronchial tubes, and as if there was not sufficient strength in expiration to expectorate the sticky, not as yet liquefied masses, and not power enough in inspiration to fill this lobe with air, which could not easily make its passage through the clogged channels. Such a case I have never seen end in pneumonia, and when the signs mentioned—subcrepitant râles, feeble respiration over nearly a whole lower lobe of one lung and slightly impaired percussion note—were present, it has become my habit, in influenza, to listen more carefully to the other lung, when the harsher breathing would always satisfy me of the existing state of affairs. But if the signs spoken of were confined to a comparatively small part only of a lobe, and the other lung would contain a symmetrically situated and similarly weak place, then I knew that the further progress of the complication would be the development of bronchopneumonia. And if the apparent subcrepitant râle sounded like the well known crepitation, heard best at the very beginning of inspiration, and if this was followed within twenty four hours by a rapidly progressing dullness confined to one whole lower lobe, then I felt convinced that I was unable to prevent—though not to guide—the onward march of croupous pneumonia. The first lung complication is rarely absent in a fully developed case of grippe; the second is often met with in the very young and very old, and *may* lead to serious trouble; the last experience has taught me to consider a very dangerous, and in the old *invariably* fatal, complication of influenza. On account of treatment as well as of prognosis, the distinction of these three lung complications is important.

No matter how manifold the picture catarrhal fever may present, all the forms of this epidemic disease can be classed under one of the following heads:—

1 *The Nasal Variety.*—The individual attacked has chilly sensations, followed by fever of moderate kind and by burning of the eyes, which he continually is forced to rub with his hands,

and a peculiar dry feeling on the Schneiderian mucous membrane. Then sneezing commences and continues for several days with little interruption. The catarrh does not only extend to the mucous membrane of the eyes and nose, but also to that of both antra and of the pharynx and neighboring parts, so that pain over the cheek-bone and sore throat are common. At the same time the patient has the same sensation all over his body as a person after having caught a severe cold, and feels remarkably weak. In some cases the whole surface provided by the branches of the sensory root of the fifth nerve is in a state of hyperæsthesia. This form of influenza, which generally attacks stout and robust men, lasts from seven to twelve days. Quinine in decided doses, and syringing the nose, and washing the eyes with a solution of benzoate of sodium (concentrated for the former, mild for the latter), an even temperature, and nourishing but easily digestible food, constitute the most successful treatment. The inhalation of olfactorium anticatarrhoicum (Hager, Comment. ad Pharmacop. Germanic.) accelerates the cure.

2. *The Neuralgic Variety.*—After some chilly sensations the patient has decided fever and excruciating neuralgic pains, which follow one of the three branches of the sensory root of the fifth nerve, mostly the ophthalmic branch. The integument of the whole head is sometimes exceedingly sensitive, a burning sensation is felt on the skin and the head seems to ache all over. At the same time there are symptoms of a moderate catarrh of the mucous membrane of the eyes and of the nose. This painful form, which if left to itself may last two weeks, affects mostly women and thin persons with a predisposition to neuralgia, and can only be controlled by very decided doses of quinine. Those suffering from this form become very feeble, and a vigorous tonic treatment should be adopted, therefore, from the very beginning.

3. *Broncho-pneumonic Variety.*—Here, chilly sensations, mostly creeping along the spine, are never absent, but of short duration and soon followed by high fever and more or less intense headache and restlessness. The temperature is rarely below 104°. The same feeling of exhaustion and debility which is met with in the other varieties appears here also, and is accompanied by more or less difficulty in breathing, by an irritable cough and pain in one side of the chest. After the disease has, for about five days, presented the picture of a common bronchitis, but with the higher temperature, the pain in the head and the remarkable weakness, it assumes a still graver aspect, and one of the above-mentioned lung complications and sometimes pleurisy makes its appearance. The prognosis depends, as also hinted at above, upon the kind of lung complication and the vitality, strength and age of the patient. It is essential to recognize this form early, so that no depletion, no treatment with tartar emetic, drastics or blisters should be entered upon, but instead of this a tonic regime with ammonia, digitalis and quinine be instituted. Opium and chloral will best relieve the headache, while benzoate of sodium should be inhaled as frequently as possible, by the aid of a steam atomizer.

4. *The Abdominal Variety.*—By chance, I had the opportunity of observing two cases of this kind five or six years ago, when catarrhal fever was also epidemic in our city, and to attend two cases of the same variety this year. The person attacked by it complains of pain in the stomach, nausea and a chilly sensation, succeeded by fever, great thirst, vomiting, constipation and a rapidly developing peritonitis, which runs its usual course, ending, by the beginning of the third week, either in death or in a very slow and tedious convalescence. From the very beginning there exists a remarkable weakness, but the intellect is, even in fatal cases, unimpaired to the last. This variety seems to attack children by preference, and is with them very severe, while adults suffer rarely from it, and then in a milder degree. There are four points of distinction by which this form of peritonitis can be recognized from all the other varieties of peritoneal inflammations: 1. The presence of the epidemic. 2. The absence of any apparent cause, neither the most careful physical examination nor the most searching inquiry into the history of the case throwing any light on the subject. 3. The rapidity of the onset; after the symptoms of a common attack of indigestion have lasted about twelve hours the peritonitis appears, as it were, over night. 4. The great debility of the patient, which accompanies the ailment from the very beginning. In adults the peritonitis is never general, only local in character, and usually confined to the epigastric region. The treatment is the same as that of peritonitis from other causes, with the exception that under no circumstances depleting measures should be adopted. Morphia and quinine, regulation of the diet, feeding by the anus, mercurial inunction into the abdominal walls, benzoate of sodium internally and turpentine enemata have met, in my hands, with the best success.

5. *Latent Variety.*—While influenza is epi-

demic at a place, any patient suffering from any acute or chronic ailment is liable at any time to be brought under the influence of the epidemic. There are two symptoms by which experience has taught us to recognize this influence when brought to bear upon a malady previously existing: a rise of temperature and a general debility; both symptoms appear suddenly and can apparently not be accounted for. The immediate administration of quinine and of benzoate of sodium, and the adoption of a tonic regime in general, are all the therapeutic measures indicated. Whenever this latent grippe attacks persons otherwise already debilitated or old, the prognosis is exceedingly grave. This explains the fact that, while catarrhal fever itself is not a dangerous disease, the mortality rate in a place where grippe is epidemic is greatly increased.

Many other and different pictures have been given of this disease, but a careful examination into the facts of each case that has come under my observation has convinced me that the varieties enumerated are the only ones which can be explained, while all the others belong to the last form (5), where simply the epidemic influence is stamped upon some other complaint.

Let us now look at the etiology of the disease. If we remember the researches of *Klebs*, who followed the bacilli typhosi from the mucous membrane of the nose and the pharynx down the lining membranes of the bronchial tubes to the lung structure itself, and down the whole alimentary tract, and if we think of the Prager epidemic of typhoid fever, during which very few abdominal symptoms were met with and the patients all seemed to suffer from the lung complications only, there cannot be denied the existence of a great analogy between the cause of abdominal typhus and that of catarrhal fever. In the latter we find varieties where the disease seems to be concentrated on the Schneiderian mucous membrane, and the channels and cavities in connection with the nose; then there are cases where we can trace the progress of some irritating substance gradually all along the respiratory tract; and lastly, cases are met with, where the infection evidently has been carried into the system by way of the alimentary canal. I have been able to detect the same infiltration of the mucous membrane, the same perivascular exudation as met with in all infectious diseases, but my microscope was not powerful enough, or my skill in preparing the specimens not sufficient, to enable me to recognize the roots and spores, the existence of which I do not doubt, and I have to leave this research to other hands, more expert in these examinations. Far be it from me to imagine that the bacillus typhus is the cause of grippe; nay, I mean that researches will soon prove that a micrococcus of some kind produces the manifold symptoms of catarrhal fever.

Another proof of the truth of this assertion is found in the different picture the disease presents in different epidemics. Just as the different cultivation of micrococci, the more or less long continued exposure of each culturing fluid to the influence of the atmosphere produces in the animals inoculated with the different symptoms, though always in harmony with each other, so the longer existence of the poison of catarrhal fever in our air, its condition at the time of entrance into the human system, causes manifold symptoms, which, in the main, however, continue the same. An epidemic of influenza starting suddenly in one part of the country usually loses its severity with its further progress, and while the first cases attacked by it in any locality generally are fatal, or at least severer, the longer the epidemic tarries at one place the milder the symptoms it causes become. Not the least reason for this theory I find in the action of such remedies as quinine, salicylic acid, carbolic acid and the benzoates. I prefer the latter, because while being as effectual, they can be given more frequently, and in larger doses, with greater immunity to the human system than is the case with other disinfectants.

507 *Franklin street.*

REMOVAL OF A LARGE INTRA-UTERINE FIBROID BY MEANS OF A NEW INSTRUMENT.

BY THAD. S. UP DE GRAFF, M.D.,

Of Elmira, N. Y.

The history of the case I am about to relate does not differ, in any essential particular, from that usually accompanying intra-uterine fibroids. That which I desire to call attention to is the great size of the tumor, the failures at removal by the usual instruments, and final success by means of a specially devised forceps to meet the requirements of the case.

The patient, a married woman, aged 42, sterile, menstruation regular but very profuse. The hemorrhages at the regular menstrual periods had grown, during the past year, increasingly profuse and correspondingly alarming. She had grown so anæmic and weak that the recumbent position, in bed, was an absolute necessity. Finally she came, or was carried, to this city and

placed under the care of a very competent and estimable lady physician, who promptly discovered the cause of the repeated hemorrhages, and recognized the necessity for surgical interference. The patient was too weak, however, to permit of any extended examination, particularly since such a proceeding invariably brought on renewed hemorrhage. After a number of weeks' treatment with tonics of quinia and iron, and subcutaneous injections of ergotine over the region of the uterus, the patient's strength had become so far restored, and the hemorrhages so modified, as to permit of an examination that should ascertain the size and point of attachment of the tumor. By means of a flexible uterine sound, the tumor was found to be attached near the fundus, encroaching somewhat upon the posterior wall of the uterus. It was found to be sessile, with a very broad attachment, and measuring four and one-half inches in diameter. The cervical canal had become obliterated through the pressure exerted by the tumor, while the os was dilated to about three inches in diameter.

This was the condition of affairs at the first consultation, held with a view of determining whether an attempt should be made at removing the growth, and for canvassing the chances for success in such an endeavor. It should have been stated that the patient suffered constant and severe pain, from pressure and weight of the growth, and was clamorous for the removal of it, even if her life was sacrificed in the attempt. It was decided, therefore, to make an effort for her relief. She was given an ounce of brandy, and placed under the influence of chloroform. The cervix was slit with serrated scissors, and the chain écraseur introduced by means of Sim's porte chaine. The tumor was drawn as far as possible, by means of a strong tenaculum, and every effort made to encircle the tumor with the chain, but without success. The tumor was so large, round, and unyielding, while the attenuated cervix and that portion which should have constituted the cervical canal, embraced the tumor so firmly, that it became simply impossible to introduce between these two structures anything so flexible as a porte-chaine. Repeated efforts only brought a flood of hemorrhage, and, having tried to reach the base of attachment by means of large, curved scissors and other appliances, without avail, we abandoned the effort to a future trial.

While trying to introduce the chain, it occurred to me—particularly since the tumor felt precisely like a fœtal head, at full term—that a pair of forceps, constructed like obstetrical forceps, but with larger curve and blades so constructed as to form a toothed and grooved articulation at their extremities, might be readily slipped over the tumor, one at a time, and then used as a torsion forceps, and the tumor twisted from its attachment.

Accordingly, drawings were made, sent to Geo. Tiemann & Co., New York, who produced the instrument illustrated in the accompanying cut.

The entire length of the forceps is twelve inches. Length of blades from pivot, five inches. Inside diameter at greatest curvature, two and one half inches. Width of blades, one inch. The remaining details are sufficiently explained in the illustration.

Just ten days after the last attempt at removal of the tumor, we again chloroformed our patient, introduced one blade of the forceps, then the other, without the slightest difficulty or delay, brought their opposing edges as nearly in apposition as possible, and then rotated the smooth blades laterally, within the uterus, until all resistance was overcome, the blades revolving with the greatest ease and smoothness. Then the tumor was delivered precisely as you would a fœtal head within the grasp of regular obstetrical forceps. Not the slightest hemorrhage followed this delivery, nor did any untoward symptoms arise thereafter, until complete recovery occurred. The tumor measured six inches in its longest diameter, and five inches in its transverse diameter. It proved to be a hard, elastic fibroid.

For all forms of intra-uterine tumors, attached at or near the fundus, this forceps offers an opportunity for removal with the greatest ease, safety and expedition.

SOME PECULIARITIES OF TUBERCULOSIS EXPLAINED BY THE PARASITIC NATURE OF THIS DISEASE.

BY F. W. VOGEL, M.D.,

Of Boston, Mass.

Since the careful and extensive researches of Robert Koch have beyond doubt established the parasitic nature of tuberculosis, a good many phenomena of this terrible disease, hitherto unexplained, have become easy to understand.

Tuberculosis, according to Koch, depends upon the presence in the body of numbers of rod-like bacteria, which are found in every case of phthisis, acute miliary tuberculosis, cheesy pneumonia, cheesy bronchitis, fungous arthritis, pleuro pneumonia of cattle, and sometimes in scrofulous affections, especially enlarged lymph nodes. This slender bacillus, pointed at both ends, the length of which varies from one quarter to one half the diameter of a red blood-corpuscle, is about five times as long as thick, and often shows four to five oval spores, evenly distributed over its entire length. This bacillus, which absorbs methylene-blue but rejects brown aniline dyes, thus differing from all other bacteria known, is a true parasite of the animal body, flourishing only at temperatures furnished by his living abode, and becomes totally inactive at the ordinary temperatures of our climate. Fortunately for mankind it multiplies very slowly, requiring nearly a week to proliferate much under the most favorable conditions, so that it has no footing upon wounds of the outer surface, like other quickly developing organisms, but is washed away by the secretions before it has had a chance to multiply. Even in the sheltered air passages, where it generally makes its first appearance, unless finding its soil prepared by previous inflammatory processes, loss of epithelium, etc., it seems entirely innocuous, being readily removed with the secretions before it has time to take root. When it once has a firm footing, its local extension is still slow, because the bacillus has no movement of its own, and, in order to reach the other parts, it must be carried thither by the lymphoid cells. If, however, the bacilli reach the lymph channels, they are carried greater distances, successively infecting the whole track of a lymph vessel, until stored up in the filter of the nearest lymph node. The matter becomes very serious when numbers of them reach the blood current in the veins, when they become disseminated through numerous internal organs, and acute miliary tuberculosis will be the result.

The anatomy of a tubercle is easily explained now also; a bacillus settles in a tissue, irritates and causes a small-cell infiltration around it; those of these cells nearest the parasite grow up to fibroblasts (epithelioid cells), which, closely pressing upon each other, coalesce and form the giant cell, so often found in the centre of miliary tubercles, harboring one or several bacilli. This giant cell is again surrounded by embryonic cells, some of which are growing up into epithelioid cells. Since no blood vessels form, the centre of the tubercle undergoes fatty degeneration as soon as the growth spreading in the periphery has become numerous enough to take up all the nutriment supplied by the nearest vessels. A number of bacilli appear to die with the cells, which gradually shrink up into a cheesy mass, but others are taken up with particles of detritus by lymphoid cells and are transported into the immediate vicinity, where they begin slowly to proliferate again, giving rise to a fresh tubercle, when the process is repeated over again, adding to the central destruction as well as to the peripheral proliferation. As may be inferred from this, the bacilli are found in greatest numbers where the process is in the act of spreading; where the latter is stationary they are difficult to find.

How do the bacilli enter the system! Koch found that sputa of phthisical patients always contained bacilli; in fact, that the grumous masses so generally present in all vomicæ entirely consisted of agglomerations of these parasites. The drying of a sputum does not rob the bacillus of its life; sputa dried for eight weeks, and injected into guinea pigs, produced acute miliary tuberculosis in every instance. The dry sputum upon the floor is ground into dust; the bacilli, adhering to some particle of the latter, enter the lungs with the air we breathe and are arrested upon some prominent spot of the mucous membrane which lies opposite the air-current, especially the ridges of the alveolar septa.

But there are other channels by which the bacillus of tuberculosis can enter our system. Pleuro pneumonia of cattle being identical with tuberculosis, the bacillus may be introduced into our alimentary canal with the meat or milk of cattle suffering from this disease.

There is one point which might be urged against the conclusiveness of Koch's observations. We mean the hereditary acquisition of consumption. Still this can be explained very easily. Judging from analogy with syphilis, the twin brother of tuberculosis, direct transmission of the disease germ is possible; also that the disease may remain latent, unless the germs are so numerous as to overwhelm the resistance of the

vigorous functions of the young cells of childhood. Furthermore, numbers of them are easily stored away in some lymph-node, where they are kept from doing general mischief for a time. Again, we must keep in mind, that in cases where direct transmission of the disease-germ has not taken place, the direct contagiousness and infectiousness of the bacillus comes into free play, the children being obliged constantly to inhale the infected air of their home, or ingest the parasite with the mother's milk.

The practical results obtained from Koch's valuable paper may be summed up as follows:—

All sputa from phthisical patients are to be disinfected immediately; also the clothing, bedding, etc., before used by other people.

Phthisical mothers must not nurse their infants.

Scrofulous, infiltrated glands ought to be excised.

Meat and milk from cattle which have suffered fron pleuro-pneumonia must not be allowed to enter our system.

Antiseptic treatment, perseveringly and vigorously carried out, is the only rational treatment for consumption. Carbolic acid inhalations through the nasal respirator, local treatment of tubercular ulcers, fungous arthritis, etc., with iodoform, have already given great results, the latter remedy being preferable in places where the drug can remain undisturbed for a longer time.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINICAL LECTURE BY FESSENDEN N. OTIS, M.D.,

Professor of Genito-Urinary Diseases.

Epididymitis.

Gentlemen:—At our former clinic we were considering the last stage of gonorrhœa. I have been hoping for cases to appear as we progress that shall illustrate some of the complications of this disease. You remember the point at which gonorrhœa commences, viz., at the orifice of the urethra, extending, by implication of the healthy mucous membrane, along the urethral canal, developing in intensity as it extends. The pain and discharge are simply associated with an inflammatory condition, which gradually declines in intensity as the disease reaches the deeper portions of the urethra.

As the disease progresses important parts may be involved in the inflammation, and when they are so, we distinguish these accidents as complications of gonorrhœa proper. One of the most important complications is the occurrence of epididymitis, which is an inflammation of the seminal apparatus. You will recollect that the mucous membrane of the urethra commences at the orifice of the urethra, and extends through to the bladder. Now, the inflammation beginning at the meatus, travels along the continuous surface of mucous membrane, and when it reaches the posterior portion it comes in contact with the orifices of the seminal ducts through which the vas deferens opens into the urethral canal.

The vas deferens is the vessel which conveys the seminal fluid from the testes to the urethra, and also along which inflammation travels from the urethra to the testes. It pursues a devious and peculiar course, which it is desirable for you to appreciate, and as we are now more particularly interested in the manner in which inflammation in the urethra finds its way to the testicle, I will take the urethra at its prostatic portion at the openings of the seminal ducts as the starting point.

These ducts opening one on each side of the sinus pocularis, pass backward to the inferior surface of the bladder, along the inner wall of the prostate, at about the junction of the posterior border of that gland, at which point the duct unites with the vesicula seminalis or seminal reservoir, and passing the vesicula to the outer side it passes over the base of the bladder, between it and the rectum, and is deflected outward, and crossing the external illiac vessels reaches the abdominal wall at the external abdominal ring; passing then down through the inguinal canal, it enters the scrotum, descending to join the tail of the epididymis, with the convolutions of which it is continuous until it reaches the secreting lobules in the substance of the testicle.

Now I think you can readily understand how a gonorrhœa, commencing in the urethra and gradually extending back, comes in contact with the seminal duct, which is lined by mucous membrane exactly similar to that of the urethra. There is no reason why this inflammation should not follow along a continuous surface. This accident does occur not infrequently. Occasionally it extends along the canal until it reaches the testicle itself. The inflammation is generally said to be in the testicle, but as it is usually confined to the epididymis and does not reach the seminal lobules, we call it epididymitis.

We have here to-day a case illustrative of this point. John F., of Portugal, aged 36. First time he has had any venereal trouble. Three weeks ago had intercourse, and noticed a discharge from the urethra for the first time about seven or eight days afterward. Had no intercourse in the meantime. Went to an Indian herb doctor, who gave him a prescription to be taken internally, and four days afterward the discharge disappeared. The epididymis of the right testicle began to swell and be painful about four days ago, that is, six days after the discharge disappeared, and still continues so. Present condition: Epididymis much swollen and indurated; cord hard and resistant to touch. Has dragging pains in the testicle.

One of the peculiarities of this difficulty is that it occurs in the later stages of gonorrhœa, when the disease in the urethra is subsiding. One of the peculiarities of all inflammation is that counter-irritation has a tendency to reduce it. In

this case the epididymitis was noticed and felt several days after the discharge had stopped. Usually the discharge ceases a little time before the epididymitis begins. It is probable that the inflammation in the testicle acts as a counter irritant to that in the urethra, and that the inflammatory discharge from the urethral canal is thus arrested.

In the present instance the inflammation has extended by continuity along the vas deferens. Here you see the testicle on the left side, which is perfectly natural; there is no tenderness, nor any engorgement. On the affected side you observe a slight redness. Swelling and redness of the integument is associated, as a rule, with all cases of epididymitis. Here we have the testicle, and lower than and anterior to it a considerable enlargement of the epididymis, which extends up the testicle. The testicle itself is not at all inflamed, and this is the condition in an early stage. You do not always find that an inflamed epididymis can be distinctly separated from the testicle, but you see a common globular swelling apparently including both the testicle and epididymis. When the inflammation reaches the deepest part it is usually transmitted through the cellular tissue in greater or less degree to the tunica vaginalis or the serous sac which contains the testicle.

The testis in fœtal life is situated in the abdomen, and covered anteriorly by peritoneum. Toward the end of fœtal life it descends, and in doing so carries down with it another layer of peritoneum situated in front of the inguinal canal. Thus it takes down into the scrotum a double layer, a membrane doubled on itself so as to form a closed sac. Between these two layers of serous membrane there is naturally a certain limited amount of serous fluid which serves as a lubricating material, which favors the easy movement of the testicle in the scrotum. In a healthy condition there is but a small quantity of this fluid present in the sac, probably a half drachm or so, but on the occurrence of inflammation the amount is greatly increased. The inflammation has extended from the mouths of the seminal ducts to the vas deferens, and from it to the epididymis. When it is intense it is propagated through the cellular tissue into this closed cavity, and an increased quantity of the fluid contained therein is a necessary result. We then have a swelling which obscures the boundaries of the epididymis and the testicle.

In this case we can, without difficulty, feel the line of demarkation between the epididymis and the testicle which would not be the condition had the inflammation been communicated to the serous sac. In that case the swelling would have been larger and fluctuation could be felt distinctly. In some of these cases the scrotal tumor reaches the size of a goose egg.

The symptoms which precede an epididymitis are important. You may always take it for granted that when a gonorrhœa has extended to the posterior portions of the canal there is great danger of its extending into the vas deferens. When the trouble first came on, this man had pain in walking, a little pain in his back, groin, and in the testicle. The ordinary course of the symptoms in cases of this kind is exactly what you would suppose when you know the manner in which the vas deferens passes from urethra to testicle. Pains regularly follow in the urethra, in the perineum, in the back, in the abdomen, in the groin, and in the scrotum. This is the natural course of the symptoms in cases of epididymitis or orchitis. Sometimes you are even enabled to trace the vas deferens by the location of the pains during the passage of the inflammation along its course.

Gonorrhœa is not the only cause of epididymitis, but any source of urethral irritation may set it up. The introduction of a large-size sound may cause the difficulty, and I have frequently found that after the passage of an instrument pain has traversed the whole extent of the passage from the urethra to the testicle. Where I have detected threatenings of an epididymitis following the introduction of a sound, I have been able to fence off the difficulty by suppositories of a quarter of a grain of morphia, introduced at once into the rectum, supporting the testicle in a suspensory bandage, and putting the patient on his back for a day or two.

In cases of this disease always support the testicles. After a gonorrhœa has continued for ten or twelve days it is safest and most prudent to support the testicles with a U. S. Army bandage. With this precaution you are likely to prevent the occurrence of an epididymitis, and will certainly lessen very greatly the danger of its occurrence.

The present condition of this patient is one which calls for simple treatment. With proper care he may be entirely relieved in a short time. He must keep perfectly quiet, and wear a suspensory bandage. I also think a good deal of narcotic fomentations during the acute or painful stage of epididymitis. By their use I think the disease may often be arrested, and always made to run a milder course.

In this case, as I said, I would prescribe absolute rest, and if he suffers any pain a suppository of a quarter of a grain of morphia. For local application let him take equal quantities of cut tobacco and flaxseed and steep them together in a little water; then take an old stocking—this is about as good a method of doing it as any—cut off the heel generously, and sew a piece of tape to each side of it, in order to fasten it up; put the hot fomentation in this, and with it cover the testicles and fasten the tapes around the waist. This fomentation should be renewed several times in the twenty-four hours. The hotter you can keep it the better.

It is always well to clear out the primæ viæ in cases where you find any general febrile reaction, and likewise give a little aconite, and in this way you mitigate the general symptoms. Then, in very acute cases, I have found a nauseant of value. In cases in which the pain and inflammation are very intense, you must put your patient on his back, in bed, and wrapping a towel around the thighs, put the scrotum on it, letting it thus have a support, which affords some relief. Then give a solution of tartar emetic, with epsom salts, until the patient is slightly nauseated.

When at sea I have seen a number of cases in which there was an acute epididymitis, and sim-

ple sea-sickness relieved the inflammatory symptoms very quickly and permanently.

After the immediate active inflammation has ceased, we must have something to stimulate the absorption of the inflammatory products, the serous fluid and plastic material, which form the swelling and enlargement. Iodine is an excellent absorbing agent, and the best form for the purpose here is the ointment of the iodide of lead. After the narcotic fomentations this ointment is very serviceable in reducing the size of the tumor.

When, however, you see a patient suffering intensely with an acute epididymitis, and also observe fluctuation, you have no time to wait for the effect of external remedies. In such a case it is best to pierce the sac of the tunica vaginalis with a hypodermic syringe, and draw off all the fluid contained. No harm can come from this simple operation, and under such circumstances it is always best to do it. First make the integument tense by stretching it with the fingers, and then penetrate quickly with the point of the instrument. When you find fluid in the sac of the tunica vaginalis, which causes pain by making the parts tense and stretching inflamed surfaces, it is always best to remove the fluid and give immediate relief to the patient.

The subsequent results of an epididymitis are of the utmost importance. You know what is the result of inflammation in any part of the body. Plastic material is invariably thrown out, which may organize anywhere, and you see, therefore, how, during such an inflammation as we have been considering, an obstruction may take place in this canal of the vas deferens, at any point over which the inflammation has passed, through the accumulation and organization of the plastic material. If such an obstruction does occur it becomes a barrier to the passage of the spermatozoa to the urethra. If any occlusion exist at any point in the course of the epididymis or vas deferens, the man will be impotent on the side in which it is situated. If the epididymitis is double the occlusion may occur on both sides, and, of course, with such a state of things, complete impotence results, and may possibly become permanent. This, undoubtedly, is a cause of many cases of sterility, following marriage, where the woman is, often unjustly, blamed. A man may have an emission containing all the characteristics of the seminal fluid, but which, nevertheless, is deficient in spermatozoa. There are plenty of men who imagine that there is nothing the matter with them, but that the cause of sterility lies with the wife, when if their emissions should be subjected to an examination, the vivifying principle would be found to be absent.

In these cases you will generally find a lump behind each testicle, a little induration at the point of the epididymis. The proper treatment consists in the use of those remedies that promote the absorption of cicatrical tissue. Give mercurials or iodide of potassium: a quarter of a grain dose of iodide of mercury for three or four weeks will often do great good. Gosselin relates a number of cases where impotence which had existed for many years was cured by this mode of treatment.

Urethral Stricture.

This case is the one we saw last Thursday. The patient was examined and found to have a stricture at the meatus and several bands of stricture further down. His symptoms, which were chiefly neuralgic pains in the thighs, perineum and above the pubis, induced me to believe that his trouble was due to reflex action, experience in many cases having convinced me that this is a common cause of such troubles. Last week I divided the stricture at the meatus, and told you that I was of opinion that all his difficulty was due to that constriction, as it is here rather than at a deeper point, that stricture is likely to occasion reflex difficulties. Since its removal he tells us that the pains that he complained of have left him.

To-day I propose to divide the deeper strictures. Bulbous sound No. 26, as you see, demonstrates stricture in the spongy portion of the canal. Before I have passed the instrument half an inch the stricture is found. This is evidently a very dense one. The bulbous sound passed the constriction with a jerk which any one could recognize, as it escaped the firm grasp of the stricture into the normal urethra beyond.

I now propose to use the dilating urethrotome. This is an instrument which first dilates the stricture and then cuts it. I turn up this screw until the blades of the instrument are separated to correspond with the normal urethral calibre, and then draw a knife through the stricture, which then cuts it completely and entirely through. The important point in the operation is to adapt the knife to the stricture properly dilated, and then made tense and thin; and when that is done judiciously there can but rarely be failure to divide it completely.

The sound, now, as you see, passes easily. I think, however, there is a slight band which still remains, not being completely severed, and as I never feel satisfied until every fibre of stricture is severed, I will again introduce the urethrotome and complete the operation. Now, on testing with the full-eyed bulbous sound, there is seen to be not the slightest obstruction at any point. This is one of the densest strictures that I have ever cut with this instrument. It is now, however, thoroughly divided, and if, as we intend, it is kept from healing by first intention, the cure will in all probability be permanent. I am aware that this doctrine of the radical cure of strictures is not generally accepted, but I hope to convince you of its truth and value before the termination of the session.

Charles Darwin Memorial.

The executive committee of the Darwin Memorial Fund recently held a meeting at the Royal Society's Rooms, Burlington House, where the subscriptions received or promised amounted to over $12,000. A decision was arrived at that a marble statue of the late naturalist should be executed, and a sub-committee was appointed to arrange for this being done. The site chosen for the statue is the large hall of the Natural History Museum, at South Kensington, for permission to place it in which the trustees of the British Museum will be petitioned.

Editorial Department.

Periscope.

Transfixion of Neck by a Walking-Stick.

In the *Lancet*, Mr. Davies-Colley reports the following curious and interesting case:—

Henry C., aged eighteen, was admitted on March 20th, 1881. Shortly before, he was walking along the side of the curb, carrying in his hand a stick, about as thick as his index-finger, and holding it by the middle, when he slipped and fell upon it. The blunt point entered his neck upon the right side, went through, and projected for about two inches upon the opposite side. With his neck thus transfixed he walked about 250 yards, to a doctor, who pulled the stick out for him, and sent him on to the hospital, after he had plugged up the left opening, from which there was a little bleeding.

On admission, he was a healthy-looking, well-nourished boy, and he had not the appearance of having met with any serious injury. He had not spat any blood, nor vomited, nor had there been any difficulty in breathing. On the right side of the neck there was a wound half an inch long, directed downward and forward, two inches below the tip of the mastoid process, and one inch in front of it. The adjacent skin was slightly abraded. On the left side there was a transverse wound, also half an inch long, directly below, and an inch from, the tip of the mastoid process. A few drops of blood had escaped from the left wound, that of exit, but barely a trace from that upon the right side. He could raise his head from the pillow with little or no pain. There was some pain on swallowing, about the pomum Adami. His voice was not at all affected. The stick was of blackthorn or holly, stripped of the bark, polished and black, with rounded knots upon it. The lower extremity was three-eighths of an inch in diameter, without a ferrule, smooth, and cut transversely, with a somewhat rounded edge. The rest was from half to five-eighths of an inch thick. His wounds were washed with carbolic lotion, and lint soaked in a mixture of oil and carbolic acid applied. He was kept in bed, and had low diet for four days, after which he was allowed to take first fish and then meat. No rise of temperature followed the injury.

March 23d: Still a little pain in swallowing. 24th: Wound on left side healed. 27th: Allowed to get up. 28th: No pain in swallowing. Feels slight pain when the head is forcibly extended. 29th: Right wound healed; there has been no suppuration, only a scanty discharge of bloody serum.

April 6th: Went out, quite well.

Remarks by Mr. Davies-Colley.—From the position of the wounds, and from the subsequent symptoms, it was thought that the stick, after entering the neck in front of the right sterno-mastoid muscle, passed between the vertebral column and the pharynx. In this course it must have been close to the great vessels on the right side of the neck, perhaps between them, near the bifurcation of the common carotid artery. On the other side it probably passed behind the great vessels, and then emerged through the fibres of the sterno-mastoid muscle. The direct line between the wounds would have been through the pharynx, but as there was no spitting nor vomiting of blood, and as the pain in swallowing was slight, it is very unlikely that this cavity was penetrated. In all probability the stick glanced against the vertebræ, and so had its direction altered. It must then have traversed the space behind the pharynx, which, in order to allow of the free movements of swallowing, is very loosely connected with the bodies of the vertebræ. The case is also of interest, as it illustrates the ease with which the vessels slip aside and avoid injury from the penetration of a blunt-pointed instrument.

Significance of Albuminuria.

At a meeting of the Cambridge Medical Society (*Lancet*) Mr. Carter introduced the subject of the Significance of Albuminuria, when not dependent on Bright's disease. He remarked on the frequent difficulty of satisfactorily ascertaining the precise meaning of albuminuria when unattended by kidney disease. Various albuminoid substances were known to occur in the urine, and besides the several forms of albumen, and the globulins, there also sometimes occurred the several ferments, ptyalin, pepsin, and trypsin. The results of various observers went to prove that out of a given number of cases of albuminuria, only about half would be of renal origin, and the remainder would be found to arise from other conditions. In one class of cases it was to be referred to the nervous system—neurotic albuminuria—and like diabetes it was not infrequently found to follow prolonged mental anxiety. The form in which it occurred in young men, the so-called albuminuria of adolescents, had been regarded as neurotic, but Mr. Carter thought it more probable that it was connected with the sexual function; were it of nervous origin it would occur in young women and girls, which it was seldom known to do. It would seem to depend upon some condition peculiar to males. Albuminuria frequently signified mal-assimilation of the albuminoid elements of the food. If the amyloids of the food failed to be normally assimilated, he suggested that a set of conditions occurred of which diabetes was the type; if the assimilation of the albuminoids were faulty, that other conditions arose which were indicated by albuminuria. The late Dr. Parkes had called attention to the condition here referred to, which he called "food albuminuria." In yet another class of cases, albuminuria signified some interference with the circulation of the blood, or some abnormal condition of the blood itself. In those affections of the liver in which it was a symptom, it might depend either on abnormal circulation, in which case serum albumen would appear, or on defective meta-

morphosis of the albuminoids, when it would almost certainly be due to the presence of some other albuminoid. In morbid pulmonary conditions, also, it might indicate either interrupted circulation or defective pulmonary excretion. When it occurred in pregnancy, it appeared that impediment to the venous circulation was commonly the main factor, but there was also an altered quality of the blood itself.

Dr. Bradbury remarked that the subject was one in which he had taken a special interest. With regard to the albuminuria of adolescents, he had in his practice been consulted by many undergraduates affected by it, and had, therefore, unusual opportunities for investigating its cause. In a large proportion of such cases the albumen was only to be found after breakfast, and he had come to the conclusion that it was due to seminal fluid finding its way into the urine in connection with the act of defecation. There could be no doubt as to the existence of many varieties of albuminuria, but it was difficult to determine the different forms. Often it was an accompaniment of indigestion, and sometimes occurred only after the ingestion of certain articles of food, as in one case which had come under his own care, in which it occurred only after the patient had partaken of boiled beef. He had seen cases, also, depending on hepatic derangement due to alcohol or other excess, and had noted the disappearance of the albumen when the hepatic enlargement subsided. Albuminuria with high arterial tension meant, as a rule, commencing Bright's disease; when accompanied by low tension, the probabilities were in favor of there being no renal disease.

Tetanus Neonatorum.

Mr. Sidney Davies reports the following case in the *Medical Times and Gazette*:—

Albert D., aged seven days, was admitted into the Training Hospital about 4 P.M., on April 3. The nurse who brought him stated that he had been quite well, and sucked the breast naturally, till the day before, when his jaws had become firmly closed, so that nothing could be passed between them, and he had a general convulsion, with flexed arms, clenched hands, and difficult breathing. He cried loudly at this time. The mother stated that the first thing she noticed was an attack of wind in the stomach, with spasms of the abdominal muscles.

Both parents were healthy, and had had four other children, all living. Their home was a fair sized cottage, of average cleanliness; the room in which the mother was confined was small. The mother's bed lay immediately under the window, but the nurse stated that she was exposed to no draught during the time of her delivery.

The child was in a state of general muscular spasm, and was crying fairly lustily. It was a very large, well-nourished male child, and had a partial hare-lip. The mouth was partly open, the lower jaw fixed, the brows contracted, eyes screwed up, and whole face drawn. The arms were firmly flexed, and the hands clenched, one thumb being inflexed, the other excluded from the grasp. The legs and toes were also partially flexed. The head was slightly retracted. The breathing was quick and shallow.

A warm bath was ordered, and after being in it about seven minutes the muscles became much relaxed.

About 7.30 P.M. on the same evening the child was seized with another attack of severer spasms. It now cried very feebly, and immersion in a warm bath produced no beneficial effect. The baths were accordingly discontinued. The severe spasm subsided shortly, but a continual state of muscular contraction remained, and exacerbations came on when the child was disturbed, as by feeding. The exacerbations soon occurred without any visible stimulus, and returned, for the greater part of the time it survived, about every half-hour; they lasted from five to twenty minutes. Ordered a grain each of potassium bromide and chloral hydrate in a drachm of water every two hours.

During the night the child lay quiet, apparently asleep, except when the exacerbations came on. Audible cries had ceased, nor did they return.

When seen again in the morning, it lay with both eyes tightly closed, face and mouth drawn equally on both sides, mouth puckered, left pupil larger than right, hands as before. Opening the eye brought on a spasm. Temperature at 10.30 A.M., 103° Fahr. Ordered the chloral to be increased to four grains, and the bromide to two grains, and given every three hours.

In the evening the spasms became more frequent and severe, and during them the child became rather cyanosed. When seen at 11 P.M., the limbs were quite lax, and examination brought on no spasm; but the face was cyanosed. A severe spasm was reported to have occurred at 10 P.M.

The medicine was now discontinued. Three spasms occurred after this, and the child died in a spasm at 1 A.M. Temperature at 9 A.M., 105.7° Fahr.

The child had been fed all along by a spoon, with the mother's milk, drawn off for the purpose. This feeding was performed with some difficulty, but on the whole the child took a fair quantity of nourishment.

Remarks (by Mr. Sidney Davies).—The diagnosis in this case was first made by the friends, for the nurse said, when she brought the child, that it had "lockjaw." Having seen the two cases of tetanus neonatorum which occurred at the East London Children's Hospital last winter, and were reported in the *Medical Times and Gazette*, I immediately thought of that disease; but when the spasms subsided almost completely in a warm bath, I gave up the idea that it was a case of tetanus, and thought it was a simple convulsion. The diagnosis, however, was made sure within a few hours by the following points: The continuous muscular spasm which supervened on the second attack of severe spasms; the fact that a warm bath with mustard did not relieve the spasms; and the absence of sonorous cry. The latter point, though not characteristic of tetanus in adults, was observed in both the above-quoted cases which occurred at Shadwell. The exacerbations were of unusually long duration in this case, lasting from five to twenty min

utes (according to the nurse's statement). The treatment adopted was that which appeared to be partially successful in one of the two aforementioned cases, *i. e.*, large doses of chloral. Certainly a beneficial effect appeared to be produced, and the death of the child—probably from spasm of the glottis—so soon after I last saw it was quite unexpected.

The Scientific Principles of Inhalation.

In the *British Medical Journal*, Dr. Robert J. Lee thus writes:—

The important relation recently shown to exist between septic agents diffused in the atmosphere and certain forms of pulmonary disease, is receiving so much attention that it is well to consider the scientific principles on which it depends. Experiments show that it is possible to diffuse antiseptic agents in the atmosphere by evaporation, and that organic substances may be preserved in such atmosphere without decomposition; or, in other words, that the air may be treated as a fluid, and be charged with antiseptics which prevent bacterial development. Now, when we burn any of the hydrocarbons or gum-resins, we do not volatilize them, and the air is not rendered antiseptic, except to the extent that a certain amount escapes unburnt and is diffused. It follows, from this, that destruction of the antiseptic agent must be avoided. After numerous experiments—and the general results of those made a few years ago were presented at the Cambridge meeting of our Association—it appears that carbolic acid is the only antiseptic, as far as I know, which can be volatilized in a definite and constant manner. This is a most important fact in treatment, and deserving attention. If a solution of 1 part of carbolic acid in 80 of water be distilled under slight pressure, the vapor will contain the same proportion of the acid as the solution during the process of boiling; so that we can obtain vapor of any strength, and diffuse it in the atmosphere. Other antiseptics are either more or less volatile; as, for example, thymol, which comes off very rapidly from the boiling water, as does also benzoic acid; so that they are not convenient for inhaling.

It is also necessary to observe that vaporizing a solution in the form of spray does not volatilize the antiseptic to any great extent, since the dew settles quickly on the nearest surfaces, and does not rise and diffuse itself as the vapor of steam does.

Again, the sprinkling of solutions on clothes does not necessarily secure diffusion of the agent; for, at the ordinary temperature, the agent may not evaporate, but will remain in the texture of the cloth. There are other details which will occur to those who reflect on these matters, and will secure such success as may fairly be expected from the scientific use of atmospheric disinfectants. I trust that I shall be forgiven for egotism in saying that I think the small inhaler exhibited by Maw, Son & Thompson for me, at the International Sanitary Exhibition at the present time, affords the most convenient and scientific means of atmospheric disinfection; and that, until more perfect methods are offered to the profession, I believe it will be found deserving of more general attention than it has yet received.

Intussusception, with Recovery.

In the Boston *Medical and Surgical Journal*, Dr. S. W. Langmaid reports the following interesting case: March 10th he was called to a female child of five months who was the subject of the above accident. The infant had always been well, and had not been particularly constipated.

He saw her on Friday. She had been well until Tuesday night, when she was restless, desiring to nurse often, but rejecting the nipple immediately. The next day she vomited, and cried out at intervals, as if from severe pain. At noon she began to have bloody discharges. The pain and bloody discharges continued until he saw her on Friday. She appeared stupid. The pulse was 120. The abdomen was not distended or tender to pressure. The finger, inserted its whole length in the rectum, encountered a tumor with a central indentation, reminding one, by its shape, of the neck of the uterus.

Dr. Sumner saw her with him two hours later. A cylindrical tumor existed in the region of the descending colon. The invaginated intestine had come down to the anus, and, holding the child in the inverted position, was seen to be of a chocolate color. The duration of the lesion, forty-eight to sixty hours, and the appearance of the bowel, decided us against any mechanical interference. The condition of the child remained the same, except that the discharges of blood became less frequent and smaller, until Sunday night, when the patient became brighter, nursed, and retained the food. On Monday there were two natural dejections, the tumor had disappeared, and the child was well.

Commenting on this case Dr. Whitney says that in the palliative treatment of intussusception a spontaneous cure is observed in fifty per cent. of the cases. It seems to him that the prognosis must depend very much upon the situation of the intussusception. If it occurs in the small intestines, and especially if the ileo-cæcal valve is invaginated, the chances of spontaneous cure would be less than when the descending colon is the region involved.

Paracentesis Cranii in Hydrocephalus.

In the *Lancet*, Dr. Hugh P. Dunn recommends paracentesis in cases of hydrocephalus, believing that when the operation is properly performed it is not dangerous, but on the contrary, is productive of much good. A small aspirator, of about half an ounce capacity, furnished with a double cock arrangement, is the instrument he uses. The child being held on the nurse's lap, with its head facing the light, the operator marks a point in the situation of the coronal suture about an inch from the longitudinal sinus, and, holding the needle firmly in his right hand, thrusts it into the cranium with its point slightly inclined inward. It is a good plan to first thoroughly cleanse the needle in a solution of carbolic acid. The needle having entered the cranium, the sur-

geon grasps it close to the scalp by the forefinger and thumb of the left hand and steadies the head with the right, and the assistant manipulates the piston of the aspirator. The piston should be slowly withdrawn, and pauses of a few seconds now and again allowed to elapse, in a manner similar to the application of the écraseur. The position of the needle may be altered from time to time, according as the tension on the piston shows that the fluid has diminished. After about half an ounce of fluid has been abstracted, compression of the cranium should be secured. The best way to secure this is to use a piece of india rubber tubing, corresponding in diameter to a quarter-inch gas pipe. The tube, around which some lint may be wrapped or sewed, should be made to encircle the cranium twice, at a level with the occipital protuberance behind and the centre of the forehead in front. As the fluid is gradually withdrawn, the tube is, from time to time, readjusted and tightened. When the operation is completed, the punctured spot is covered with a piece of dry lint and attention directed to compression of the cranium, which can be accomplished by fixing the tube *in situ*, or a capeline bandage of flannel carefully applied.

To sum up, paracentesis cranii is indicated in all cases of acute and chronic hydrocephalus, in which, medicinal treatment having failed, the patient is clearly suffering from increase of the fluid and life is threatened. It is the only means by which life can be prolonged, even if, by its performance, the disease is not arrested. All the fluid which can be obtained should be withdrawn. The operation may have to be repeated, should a re-collection of the fluid be followed by a return of the symptoms which made its previous performance necessary. The risks attending the operation are almost *nil*, if carefully performed.

A Peculiar Skin Eruption During Pregnancy.

Dr. R. J. W. Oswald reports the following interesting case in the *Lancet*:—

Mrs. A., aged forty, the mother of five children, was confined of a healthy male child on March 7th, 1882. She had had no child or miscarriage for eight years and three months previously. When about five months pregnant with this last child, she noticed a squamous eruption appear on the upper third of the forearms, not affecting the flexures of the elbow joints. This eruption gradually became worse, the skin was indurated and raised, and eventually both forearms and hands were affected. Almost concurrently with this the lower limbs showed the same peculiarities, with some variations, however. The enlargement was very great, almost to twice the natural size, accompanied with œdema. The skin was very rough and hard, and appeared similar to "elephantiasis." About two months before the patient was confined, larger bullæ appeared on the lower extremities, but at no time were the upper limbs thus affected. Some of these bullæ burst and formed hard, thickened crusts, from which exuded a thin, glairy fluid. The pain accompanying this affection was very severe, and the patient was unable to go about her household duties for fully three months previous to her confinement. Immediately after the confinement the skin of the forehead, face, neck, and upper part of the chest, which up to that time had been free from blemish, began to be squamous and indurated, and very much thickened, but no bullæ appeared at any time. Both anæsthesia and hyperæsthesia were present. She is now (seven weeks after her confinement) better in some respects, although there are still a few bullæ on the legs, and the skin still shows to a slighter extent the peculiarities just described. The patient is no doubt of a rheumatic diathesis, but whether this, combined with the great changes the system undergoes during pregnancy, has helped to cause this eruption, I cannot say. The only treatment adopted has been absolute rest and the administration of alkalies. Previous to her confinement eight years ago the patient had a similar eruption on the forearms and hands, and the legs and feet were affected also about two months before the confinement. In about three weeks after this the skin was clear again, and the severity of the attack was not nearly to the extent as in the present instance.

Reviews and Book Notices.

BOOK NOTICES.

A Treatise on the Physiological and Therapeutic Action of the Sulphate of Quinine. By Otis Frederick Manson, M.D., etc. Philadelphia: J. B. Lippincott & Co. 1882. Small 8vo. pp. 164. Price $1.00.

A book without either preface, table of contents or index, impresses a reader at first sight unfavorably, as indicative of negligent preparation, or deficient literary skill. This is the case with the work before us, and the impression is not removed by examining the text. It is largely made up of quotations, many of them second-hand, and presents very little original matter. Histories of a few cases are all that the author contributes from his own knowledge. As a compilation from current writings, it will, however, be found to contain many useful facts.

Hints and Remedies for the Treatment of Common Accidents and Diseases. By Dawson W. Turner, D.C.L. 8vo. pp. 106. Cloth. Price 50c.

In the compass of a hundred quite small octavo pages the compiler of this volume gives a vast deal of useful information about matters of every day comfort and hygiene. No one can spend half a dollar better than in buying it. He is too sanguine of success in some of his recommendations, but that is a trifling fault.

What To Do in Cases of Poisoning. By William Murrell, M.D. Second Edition. George S. Davis, Detroit. 1882. 32mo. pp. 96.

This is a "vest pocket" book, and as it is prepared by a competent hand, it may be relied upon as accurate and giving the most recent antidotes.

THE

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THE MORTALITY IN HEATED TERMS.

The heavy mortality which always attends a "heated term" in our large cities is apt to be attributed, by hasty observers, to the heat directly. But, in fact, a temperature which at its maximum is not equal to that of the normal human body is not unfriendly to health. On the contrary, it is favorable. An eminent English authority on vital statistics has summed up their relation to mortality in the terse sentence, "Waves of heat are waves of life; waves of cold are waves of death."

The same result is seen in comparing the relative populations of countries. The density increases from the absolutely uninhabited poles to the tropics teeming with life in every form.

We must look somewhere else, then, than to the heat alone, to explain why the mortality in New York city, for instance, is, in July, at the rate of an annual average of fifty or sixty per thousand, while in the cooler months it is twenty-five or thirty.

This difference is an artificial one, of man's creating, and is preventable.

We must, indeed, allow that sudden changes, from cold to great heat, act unfavorably, and part of the mortality is fairly attributable to this. Only a small part, however. The great bulk of deaths are unquestionably caused by injurious food and habits of life.

The mortality is greatest among children, whose food is of a character most apt to be spoiled by heat. Pure, sweet milk, scarce at all times, is next to unobtainable in the July heats, in great cities. Fruit of all kinds is abundant, but generally immature or partly decayed. Meat, which is not a diet for hot weather, becomes most easily tainted, and the animals from which it is taken are, at this season, often over-heated or unhealthy. Stimulants of every kind act most hurtfully in great heats, and yet their consumption is actually increased then, the thirst brought on by the actual transudation prompting thereto.

The houses and clothing customary and suitable to moderate weather are both ill adapted to a temperature above 80°. The clothing may easily be thrown aside, but not so the houses. The heated walls maintain the temperature during the night, and sleepless hours wear heavily on the overtaxed, nervous system.

These hints indicate why a "hot spell" is a destructive one in our latitude. Reflection will show that it is so because we will not observe the mode of life, at that period, which the experience of warm countries proves is the suitable one. Even under the unfavorable surroundings of an alley in a city, it is quite possible to be cleanly, temperate, careful about food, and observant of the rules of hygiene. Were this generally so, we should have no such long lists of deaths to witness at such periods.

THE POSITION OF IODOFORM IN THE ANTISEPTIC TREATMENT OF WOUNDS.

The reports of the almost magical results with iodoform as an antiseptic, especially in the treatment of wounds or in operations upon tubercular soil, have been followed quickly by warning voices, which want to banish this antiseptic entirely, on account of its many dangers. The

latter are classed by Küster under the following heads:—

1. *Local Disturbances*:—

(*a*) Iodoform acts as a foreign body, causing partial non-union or fistulous openings, through which the drug may become eliminated as a worm-like pulp.

(*b*) Iodoform may cause a phlegmon, on account of mechanical irritation, probably. The inflammation, often accompanied by fever, shows itself as a diffuse, firm infiltration of the skin, of a slightly purplish color, which is only slowly absorbed.

(*c*) Iodoform gives less protection against erysipelas than carbolic acid.

2. *General Disturbances*:—

(*a*) Disturbances of digestion: food acquires the iodoform taste; the tongue becomes coated; anorexia follows; often diarrhœa supervenes, even with bloody admixture.

(*b*) Iodoform causes fever, especially in excitable patients, which may reach 106° F., while the pulse ranges between 120–160, with a clouded sensorium, a dry and fissured tongue, simulating septicæmia.

(*c*) Iodoform strongly impresses the nerve-centres, in the form of delirium, melancholy, contraction or dilatation of pupils, amblyopia; even mania, has been observed; also loss of sensation (which, however, might have been peripheral).

(*d*) Iodoform may cause death by irritation of the respiratory tract or of the nerve centres.

Since, however, it would be a step backward to throw away a remedy which, especially in scrofulous or tuberculous changes of the joints and bones, has so far surpassed in its beneficial effects all antiseptics hitherto known, it will be well to listen to the voices of Kœnig, Leisrink and others, in whose hands iodoform has shown itself uniformly efficacious, without the appearance of a single untoward symptom. Their success is simply due to their manner of application of this antiseptic. They have given up the application of larger quantities of iodoform in substance, as well as the iodoformed cotton; the former, on account of the danger from absorption; the latter, on account of the imperviousness to the secretions of the wound, often met with. Their aim is to use as little iodoform as possible, and they obtain it with the iodoformed gauze, applied in the following manner:—

(1) Upon all fresh wounds, which are not tuberculous, whether they have been closed by sutures or not, 6x8 layers of iodoform gauzing are placed, and covered by a compress of cotton, gutta-percha paper and a tulle binder.

(2) In all tubercular wounds of bone, joint or soft parts, the walls of the wound are once rubbed over with iodoform, as little in quantity as suffices to reach every part of the wound; (1½–2 drachms have always been found enough). Upon the wound, which has been closed by sutures or left open, the same 6x8 layers of iodoform gauze and compress is laid as upon ordinary wounds. At any further change of the dressing only the gauze and compress are renewed, but not the sprinkling with iodoform. The results in all cases of this class are far superior to those obtained with Lister's method.

(3) In all wounds of cavities (in mouth, nose, vagina, rectum), only iodoformed gauze is used.

Of course, during the operation, and at every change of the dressing, the ordinary antiseptic precautions, with the exception of the spray, have been observed: Cleaning of the field of operation, of the hands of the operator and assistants; rinsing of the wound with a 2 per cent. solution of carbolic acid during, and with a 5 per cent solution at the end of the operation. The latter seems especially indicated, since the disinfecting action of the iodoform is not an immediate one.

A PURER KERATIN.

Organic chemistry is daily increasing this world of wonders. We notice more and more how economical nature is, and with what simple means she often produces great results. Wilhelm Lindvall recently has subjected the egg-shell membrane to a most careful analysis, and published his very interesting researches in the *Upsala Läkarefören Förhandl.*, xvi, 7, p. 546, etc., 1882.

Hammarsten had found that the egg-shell membrane exhibited in all its reactions, and especially by its great resistance to acids in the warm temperature of heated rooms, an intimate relation to elastin, and Hilger has proven the egg-shell membrane to be a substance identical with the elastin prepared from the ligamentum nuchæ, and that even the structure of this membrane denoted a changed elastic tissue. But investigations which Lindvall made under Hammarsten's guidance gave such results that this similarity must be doubted.

An alkaline solution of the egg-shell membrane was made and neutralized, when a very strong development of sulphuretted hydrogen took place, and the addition of acetate of lead caused an undoubted reaction of sulphur, while elastin is perfectly free of sulphur. This result suggested keratin, which, as is well known, is characterized by its great percentage of sulphur.

Prof. Hammarsten then made a careful analysis of the egg-shell membrane, and found that it consisted mainly of a body, the composition of which was 49.78 per cent. C.; 6.64 per cent. H.; 16.43 per cent. N.; 4.25 per cent. S. and 22.89 per cent. O. But this is almost the identical formula of keratin, with the only difference that keratin prepared from other sources contains a higher percentage of carbon. It has long ago been demonstrated that the percentage of carbon in keratin depends upon the source from which the latter is derived. Now the nearest in the percentage of carbon to the keratin of the egg-shell membrane is the one derived from epidermic tissue (skin, hair, wool, etc.). It seems that the easier foreign substances can be eliminated, the less is the percentage of carbon in keratin, and that, therefore, the latter is the purer, the smaller its percentage of carbon. The keratin derived from the egg-shell membrane must actually be considered, therefore, the purest keratin, so far, artificially produced.

Concerning qualitative reactions, the egg-shell membrane possesses also the common qualities of keratin. The membrane has a strong resisting power to caustic alkalies at the usual temperature of a room, and shows the same relation to mineral acids as other tissues rich in keratin.

It seemed interesting to note the results of decomposition of keratin derived from the egg-shell membrane, and Lindvall exposed it, therefore, to the action of caustic alkalies and of mineral acids. At first he thought that by neutralizing an alkaline solution of this keratin a pure peptone was gained as a result, but this could not be fully demonstrated; when, however, the keratin was boiled with sulphuric acid a dark brown solution formed, which on being neutralized with a boiling solution of baryta resulted, after the necessary procedure, in a crystalline precipitate, exhibiting under the microscope the perfectly typical crystals of leucin and tyrosin, the latter in surplus.

As the most important result of these researches Lindvall considers the fact that the keratin, if boiled with an alkaline, probably by hydration, splits into an alkaline albuminate and into peptone, though the latter cannot be freed from impurities and isolated.

Notes and Comments.

Arsenic and the Secretion of Milk.

Dr. Dolam has been the first physician to detect in the milk of a mother who regularly and in medicinal doses (daily dose 0.012 arseniate of potassium) had been taking arsenic for some time, decided trace of this drug. His case is the only one of the kind on record.

The question, if certain medicines, when given to the mother, will be transmitted by the milk, has given rise to many investigations, which so far have led to positive results as regards iodine and iron. That these are transmitted cannot be doubted any more. As concerns mercury the reports vary, and this point is not decided as yet. Beneke and Pauli have demonstrated the presence of salicylic acid in the milk, while the same fact as regards quinine has been denied.

At one of the last meetings of the Berlin Medical Society (Feb. 15, *a. c.*) this subject came up for discussion, and Dr. Ewald declared that of arsenious acid he had not been able to find in the whole literature any other proof for its transmission in the milk than the one quoted above. Ewald then, himself, reported the following case:—

In the spring of last year he was called to a lady, aged 22, who suffered from prosopalgia, of an intermittent type, the pains being very severe, commencing during the night and lasting from two to three hours. During daytime they were absent. These pains had first appeared after confinement, and had then continued for several weeks. As all other remedies (quinine, morphia, chloral, etc.,) had been tried unsuccessfully Ewald concluded, notwithstanding the lady was nursing her child, to use arsenic (solut. Fowl. one part, water two parts, daily dose thirty drops), and he did so with such good result that the pain ceased by the fifth day.

Ewald made several times daily a careful analysis of the milk, but he never found the slightest traces of arsenic. The transmission of the latter in the milk must, therefore, be seriously doubted.

Acute Myelitis with Double-sided Neuritis Optici.

The following case, which Dr. Henry D. Noyes had under his charge and reported in the *Arch. f. Ahkde*, x. 3, p. 331, is in so far of great interest, as the issue of the case was remarkably favorable, ending in an almost complete cure.

A minister of the church, 25 years old, and an habitual and inveterate smoker, but otherwise in perfectly good health, began to suffer first from constipation and then from difficulty in urinating. At the same time he complained of a cold sensation in his lower extremities and could cross one leg over the other with exertion only. First, vision of the right eye, and, about a week later, vision of the left eye also, became very much impaired. In both eyes, but especially in the right, the inner half of the papilla became swollen and hyperæmic. Besides concentric narrowing of the vision there existed also a central defect. Large doses of iodide of potassium were given the patient internally, and the neck and back over the spinal column were cauterized. Gradually the patient reached the enormous dose of about five drachms (18 grams) of iodide of potassium per diem, and this medication was continued for fully one month and a half. The scotoma cleared up totally; two months later both eyes possessed their normal power of vision and a perfectly clear field of vision had been regained. But occasional giddiness, headache, and some difficulty in micturition, notwithstanding a normal composition of the urine excreted, were still present.

In consequence of the favorable issue of the case it must always be an open question, if the diagnosis regarding the seat of the lesion—inflammatory affection of the spinal cord, accompanied by a morbid change confined to the commissure of the optic nerve—was the correct one.

Two Cases of Tumor of the Brain.

Prof. H. Nothnagel has reported (*Wien. Med. Bl.*, 1, 1882) two cases of tumor of the brain, which are highly interesting from a diagnostic point of view.

In the first case Nothnagel diagnosticated a tumor in the corpora quadrigemina, basing his diagnosis upon the fact that these two symptoms, besides others, were present at the same time, an ataxia and double-sided paralysis of the oculo-motorius and of the abducens, in the following form: when looking upward the bulbi hardly moved above the horizontal line—toward the right side a little more but also imperfectly—toward the left side the left bulbous did not move at all, the right imperfectly—downward full motion but the left less than the right. At converging the rectus internus sinister kept behind.

In the second case existed a tumor in the left cerebral hemisphere and Nothnagel had diagnosticated a tumor in the posterior fossa, basing this opinion upon the following group of symptoms: vertigo, staggering in walking and standing, inclination to fall backward, paresis of the favialis, especially the crossed paralysis of the abducens with slight paresis of the extremities, but no perfect paralysis of the latter.

With reference to these cases Nothnagel thinks that he cannot sufficiently insist upon the great caution that should be exercised in the localization of tumors of the brain, as it is impossible, frequently, even to guess at the polypus-like extensions of such tumors.

Athetosis and Vasomotor-neuroses of the Extremities.

Dr. M. Bernhardt, in Berlin (*Sep. Abdr. Arch. f. Psychiatrie Bd.* XII. *H.* 2.) reports a case in which there is at present hemi-athetosis and hemianopsy of the right side. About three years ago, and after a serious illness of several weeks, duration, right-sided paralysis and aphasia developed themselves in the patient, a girl, then seventeen years of age; within a few weeks the aphasia improved, the hemianopsy, which had been existing from the very beginning, continued; the paralysis had given away to incessant and hasty motions of the right hand and the right arm; these choreic motions had also gradually disappeared, and there were left only slow, grasping motions of the fingers, which continued to

the present time, as did also the hemianopsy; the whole right side does not move as easily as the left. This case proves again the correctness of the view formerly expressed by Bernhardt, that athetosis is only a modified (mostly one-sided) chorea, a view which has been accepted now also by Charcot.

Bernhardt reports also two cases of local asphyxia of the extremities, an ailment which must be ascribed to a disturbance in the circulation of the blood in the peripheral parts of the body, but which is without doubt caused by a special morbid condition of the vasomotor centre. The constant current improved one case temporarily and cured the other permanently; quinine in divided doses had been unsuccessful in the first case.

Hypodermic Injections of Caffein.

The *Lancet* says that, owing to its very slight solubility in water, caffein has not hitherto been used hypodermically. M. Tanret has discovered that caffein dissolves readily in solutions of benzoate, cinnamate and salicylate of soda, the double salts being thus formed. Salicylic acid yields the salt most soluble in water. M. Dujardin-Beaumetz has employed these solutions hypodermically, and has ascertained that they do not irritate. Solutions for administration by the mouth may also be readily obtained in this manner.

Iodoform to Mucous Surfaces.

Application of iodoform in diseases of the mucous membranes (B. Fränkel, *Berl. Klin. Wochenschrift*, p. 252), have been found very beneficial in the following chronic affections of the cavities of the nose, pharynx, larynx, lungs, uterus, and of the conjunctival sac:—

(1) Tubercular ulcerations of the larynx are powdered with iodoform once a day. Ulcers appear cleaner, show granulation growth, whole local morbid process retarded, but not cured; subjective symptoms improved.

(2) Phthisis pulmonalis is treated with vapors of iodoform (bottle half filled with water, iodoform thrown in: heating to 190° F. creates iodoform vapors), or inhalation of etheric solution of iodoform (1:60); subjective symptoms, especially cough, improved, fever reduced.

(3) Atrophic retro-nasal catarrh is treated with iodoform powder blown into nostrils or snuffed up, or the iodoform ointment (1:10 vaseline) applied on swab or brush, with excellent results; new life seems to be imparted to the remaining elements of the mucosa, which become more succulent, its epithelium thicker, formation of crusts subsides. Of course, the same treatment for ozæna, with the same splendid results.

(4) Scrofulous rhinitis. Iodoform (1), tannin (2), vaseline (10), is applied with camel's-hair pencil or tampon (the latter on alternate days, into one or the other nostril): the rapidity of cure is astonishing.

(5) Of course, locally, upon all syphilitic affections of these cavities.

[(6) Applications to endometrium in chronic inflammation of this membrane, in powder or with cocoa-butter.

(7) In follicular conjunctivitis (second stage) in minimal quantities directly applied to follicles].

The Antagonism between Strychnia and Opium.

Dr. C. Harrison relates a case in the *Lancet*, which well illustrates the antidotal power of opium over strychnia. A man who had for some time been drinking very hard, mixed up a packet of vermin killer (containing ¾ of a grain of strychnia) with about a teaspoonful and a half of laudanum, added some rum and drank the mixture. He was seen about four hours after taking the poison, when he presented evidences of strychnia poisoning. He was given an emetic, which caused him to vomit freely, after which chloral hydrate sufficed to control the spasms. The case is interesting, as, after a poisonous dose of strychnia taken under the most favorable circumstances for absorption, fifty minutes elapsed before any symptoms became manifest, and the man was alive four hours afterward, although he had received no treatment. No doubt a fatal result was prevented and the intensity of the symptoms modified by the laudanum.

Apomorphia as an Expectorant.

We read in *le Journal de Thérapeutique*, that Dr. Beck used apomorphia as an expectorant in sixty-three cases of bronchial catarrh, and in thirty-one of broncho-pneumonia. The bronchial secretion becomes more fluid and the thick secretion common particularly in broncho-pneumonia is ejected with more facility. The prescription for an adult is as follows:—

℞.	Apomorph. chlorhydrat.,	gr. ¾
	Ac. chlorhydric. dil.,	♏xv
	Syr. simplicis.,	℥j
	Aquæ,	℥iv. M.

The dose is a tablespoonful every two, three or four hours. A teaspoonful would be the proper dose for children of from three to ten years of age.

Subcutaneous Stretching of the Sciatic Nerve.

The patient (generally a case of locomotor ataxia) is placed in the recumbent position, brought fully under the influence of an anæsthetic, and the femur is then flexed forcibly on the abdomen. It is said that the sciatic nerve is stretched this way around the neck of the femur. Results gained in this manner by Nussbaum in Munich, and by Billroth in Vienna, have been satisfactory. Accidents like luxation or tearing of parts, which were feared by several English writers, have not been met with. Prof. Trombetta, in Messina, claims, in the *Lancet*, the priority in this bloodless operation.

Carbolic Acid in Blood Poisoning.

The French surgeon, Declat, has recently been making some noise about his discovery of the value of hypodermic injections of carbolic acid in blood poisoning. He extends its value to scarlet fever, smallpox, typhoid fever, etc., and declares that the potent little syringe enables him to "laugh at" these diseases. This is the extravagance of enthusiasm. There is some value in the method, but a limited one. Nor was Declat its originator. Four years ago D-. N. B. Kennedy, of Texas, used and wrote upon the advantages of these injections. and in April, 1881, he read a paper before the Texas Medical Association, in which he claimed priority of all others in its employment.

Special Reports.

NO. IX.—OPHTHALMOLOGY.

BY CHARLES S. TURNBULL, M.D.

Contagious Ophthalmia. On Croup of the Conjunctiva, with Remarks on the Treatment of the Contagious Forms of Conjunctival Inflammation. By H. Knapp, M.D. *Archiv. Ophthal.*, Vol. xi, *No.* 1.

The observation of so-called extreme cases is sometimes required to throw our mind away from the track of familiar views, into new channels of thinking. We then recognize the significance of certain manifestations which we failed to appreciate so long as we noticed them only in low degrees of development. Such an extreme case, from the common group of muco-purulent conjunctivitis, came under my care lately, and forced me to change my opinion of that kind of inflammation, which several authors have described as croupous or membranous conjunctivitis.

Mild cases of this affection, are not infrequent. They begin under the form of acute catarrh or moderate blennorrhœa, but soon are distinguished by the formation of thin, whitish membranes, covering the palpebral portions of the conjunctiva. Under the ordinary treatment of astringents, cold applications and careful cleansing, they get well in from three to six weeks. Having seen so frequently that the membranes had no appreciable influence, either on the gravity or the course of the disease, I did not consider them as an essential feature of the disease, and classified the cases mostly as acute catarrh. Sometimes, when the discharge was more puriform than mucoid, as acute blennorrhœa.

C. S. Bull, in the third American edition of Sœlberg-Wells' text-book, devotes fifteen lines to croupous conjunctivitis, in which he says: "This form has been regarded by some English and Continental authorities as a distinct variety of conjunctivitis, but there seems good reason to doubt this. * * * The treatment consists in stripping off the membrane and cauterizing the surface, as in catarrhal or purulent conjunctivitis."

H. D. Noyes, in his recent treatise on the diseases of the eye (Wood's Standard Medical Library, 1881), devotes a page and a third to "Croupous, or diphtheritic conjunctivitis," (p. 168). Though he describes croup and diphtheria under the same title, he points out the principal distinction between the two forms of exudation, but also regards the croupous membrane as an unessential feature of muco-purulent ophthalmia.

I have changed my opinion on this subject, and concur with Arlt,* Stellwag,† Saemisch,‡ and Wecker,§ who, especially Saemisch, give clear descriptions of the disease, and state that we have to consider croup as a distinct form of conjunctival inflammation. It differs from catarrh, blennorrhœa, and trachoma, by the presence of the characteristic whitish membranes, and from diphtheria, by several points, which I beg leave especially to mention:—

1. In diphtheria the lids are very stiff and hard; it is difficult or impossible to evert them; in croup the lids are supple and soft, and can be easily everted.

2. The diphtheritic lid is unusually hot and painful to the touch, whereas the croupous lid can be handled without much pain.

3. The diphtheritic exudations are continuous

* Text-book, first edition, 1851, p. 35, and his next text-book, Klinische Darstellung der Krankheiten des Auges, 1881, pp. 16–19.

† Text-book, fourth edition, 1870, p. 423.

‡ Graefe-Saemisch's Handbuch, Vol. iv, No. 1, pp. 94-101.

§ Wecker-Landolt. Traité Complet d' Ophthalmol., 1878. Tome i, p. 320.

from the deposit on the surface, through the superficial and deeper layers of the conjunctiva, whereas the croupous exudation is a surface deposit only.

4. The diphtheritic membrane cannot be easily removed, but must be torn off with some force, leaving the subjacent tissue pale and ragged; whereas the croupous membrane can be wiped off as a whole, leaving the subjacent tissue dark red, bleeding, and uneven—finely nodular.

5. The tissue of the diphtheritic lid when cut into is anæmic, and has, in the developed cases, a white, lardaceous appearance, whereas the tissue of the croupous lid is highly congested and soft.

6. The diphtheritic process leads to mortification of the invaded conjunctiva; the croupous process to proliferation, and cauliflower or polypoid excrescences.

7. Diphtheria readily extends from the lids to the bulbar conjunctiva and the cornea, whereas croup is long limited to the lids, and only the severest cases affect the cornea, and seem always to leave the scleral conjunctiva free.

Croupous conjunctivitis begins with the symptoms of an acute catarrh, or mild blennorrhœa, but soon characterizes itself by deposition of whitish membranes on the retrotarsal folds of both lids, extending toward the front of the conjunctiva and the free edge of the lids, as far as the so-called papillary body is found. The membranes consist of coagulated fibrine enclosing lymphoid cells in varying quantities. They may cover the palpebral conjunctiva in patches only, or as a continuous layer of 0.1 mm. to 1.5 mm. in thickness. They can be more or less wiped off, and are quickly reproduced. The surface from which they are detached is dark-red, easily bleeding, uneven, not ulcerous, but finely granular. The lid is moderately swollen, not very sensitive, and can be everted without much difficulty or pain. The discharge is sero-mucous or sero-puriform and moderate. The progress of the disease is marked by the uneven swelling of the papillary body passing over into proliferation, with the production of smaller and larger cauliflower, and polypoid excrescences. The pesudo-membranes cover all the productions, dip into the depressions and crevices of the proliferous conjunctiva, and cannot be detached without lacerating and tearing off portions of the conjunctiva, thus causing effusion of blood, which shows a high degree of coagulability. Croup, in contradistinction to diphtheria, seems never to affect the scleral conjunctiva, and only exceptionally the cornea, there producing ulcers. These ulcers may be superficial, and disappear in a short time, or become more extensive, occupy and destroy the whole cornea. From their whitish aspect and firm, even surface, which is rather raised than depressed, I am inclined to believe that they also are covered with a croupous deposit. Even in that stage they are capable of restitution, leaving an unexpectedly small corneal patch, when compared with their former size and intense milky opacity. They are complicated with consecutive plastic iritis, which may get well without adhesions or papillary obstruction.

Course.—The milder forms of the disease are not infrequent, the severest ones very rare. The characteristic croupous stage seems to follow the catarrhal initial symptoms in a few days; may last for one or several weeks, or from two to six months. When the membranes disappear they get softer, thinner, and brittle; the discharge then is muco-purulent, but still moderate, when compared with genuine blennorrhœa.

The nature of the disease consists in a swelling and proliferation of the papillary body of the conjunctiva, and the formation of fibrinous pseudo-membranes, which are interspersed with lymphoid cells and deposited on the surface, infiltrating the tissues of the lid. Its causes are those of catarrh and blennorrhœa. The disease is contagious and mostly affects both eyes. A constitutional predisposition may, perhaps, be admitted, as the catarrho-blennorrhœic conjunctivitis, which in asylums goes from one inmate to the other, only in a few assumes the croupous character. Croupous conjunctivitis, like pharyngo laryngeal croup, is prevalently a disease of childhood. Some patients have croup of the eye and sore throat simultaneously.

The prognosis, on the whole, is favorable, the disease showing no marked tendency to affect the cornea, and, unlike diphtheria, leading to no gangrene of the parts affected.

As to the treatment, I can only concur with Arlt and Saemisch, in advising to abstain from all kinds of irritant medication as long as the formation of the pseudo-membranes is still active. Uninterrupted application, day and night, of iced compresses to the lids, and careful washing away of the secretion with a soft sponge dipped in a very weak solution of chloride of sodium, chlorate of potash, and the like, should be enforced so long as the inflammation is progressing or at its height. As soon as the swelling decreases and the membranes break off, the cold applications may be limited to an hour every morning, noon and evening, and gradually left off. Weak solutions of nitrate of silver then seem to

be the best remedy, and also mild touching with the sulphate of copper crystal acts beneficially. Saemisch thinks that in a few mild cases he has cut short the progress of the disease by dusting powder of sulphate of quinine on the affected conjunctiva. I have no experience on the use of quinine in this manner, and Saemisch himself warns us not to use it in severer cases, lest the powder, acting as a foreign body, stimulate the inflammation.

I beg leave to take this opportunity for making some remarks on the utility of methodical applications of cold in the severer forms of conjunctivitis, and on the general management of these affections. They are all contagious, yet not in such a manner that an infection through micro-organisms or other substances floating in the air need be feared. Practically, the disease is transmitted only by inoculation. Under proper care, the most virulent gonorrhœal or diphtheritic inflammation of one eye is never transmitted to the fellow eye, even if left open ; a fact of which I have convinced myself by hundreds of cases treated in hospital or private practice. Under proper care? What is proper care? Proper care is two skilled and trusty nurses, the one for the day, the other for the night, who never leave the patient ; further, a rational physician who is not too meddlesome a therapeutist. I speak now of ophthalmia neonatorum, blennorrhœic or gonnorrhœic ophthalmia of the adult; of croupous and of diphtheritic ophthalmia ; also of the acute stage or acute paroxysms of trachoma. The treatment of all of these cases is the same, and amounts to this: So long as the disease is on the increase or at its height, abstinence from all but indifferent local remedies, methodical and uninterrupted application of cold, and careful cleansing; in the stage of decline, the same treatment in milder form ; in torpid and protracted cases, astringents or mild caustics.

The infant of three days and over, who has blennorrhœa, should have cold applications day and night, by means of thin iced compresses, which cover no more than his burning eyelids. Every fifteen to thirty minutes the lids should be gently separated and the secretion carefully washed out with a fine, soft sponge, dipped in a very weak solution of common salt, chlorate of potash, and the like. Several sponges should always be at hand, kept in an abundance of pure water, so as to keep them perfectly clean. There is no material equal, in softness and efficiency, to fine sponges. To see that they are free from infection is our business, and a very easy business it is, for among all the disinfectants there is one which, unshaken, has stood the test of time: abundance of water. There is no contagion that is not made harmless by sufficient dilution ; contagia can all be drowned. As soon as the little sufferer shows the least tendency to open his eyes, he should be encouraged in his endeavors. Darken the room moderately, so that the influence of bright light does not make him shrink. The opening of the eye is beneficial in two ways: 1st. The movements of the lids beat the corrosive secretion out of the conjunctival sac. 2d. They accelerate the circulation in the affected parts, thus diminishing congestion, stasis, and infiltration. We know that the venous circulation in the extremities of our body is materially favored, I mean mechanically assisted, by muscular action. When a child opens his eyes, the danger is over, only a relapse must not be allowed to occur. The iced applications have to be continued, until the swelling of the lids and the creamy character of the discharge have disappeared. No child need lose its eyes from ophthalmia neonatorum, and no child does, if faithfully treated in the way just described. I unhesitatingly commit myself to this assertion, since the cases over which I had full control terminated favorably, and they count, not by the dozen or hundred, but by the thousand. Other modes of treatment may be good—and there is no doubt that certain eyes escape destruction under all kinds of treatment—but the one pointed out is capable of saving them all, and only in order not to be absolute I admit the restriction of saying, "almost all." But great and incessant care is needed. Prophylactic measures, such as cleansing the vagina before and during delivery, and washing the child's eye with weak, so-called antiseptic solutions, of which nitrate of silver one-tenth to one-fifth per cent. is the best, may be useful, and need only be mentioned. I cannot speak with the same satisfaction of the results of the treatment of gonorrhœic ophthalmia in adults, though the same plan of treatment pursued with the same rigorousness and persistency saves, as far as my experience goes, the great majority of cases. Slitting of the outer commissure, if there be great tension, is beneficial, but can almost always be avoided, since the cold keeps the swelling down. The proposition of Critchett, of London, to divide the upper lid in its centre, in order to save the cornea from destruction, need certainly not be adopted.

What good the application of cold may do in croupous ophthalmia is exemplified by experience.

In diphtheria of the conjunctiva I know of no more important remedy than the energetic and persistent application of cold. I cannot countenance the proposition of Mooren and Berlin, by warm applications to abridge the true diphtheritic stage and lead the process more quickly over into the less dangerous blennorrhœic stage, since I am convinced that nothing is so powerful in diminishing the violence of this dreadful inflammation as cold, and I am afraid that warmth may temporarily increase it and favor destruction of the cornea. I have to differ from the statement of Dr. Noyes and others, that diphtheria of the conjunctiva is a very rare disease in New York. My former assistant, Dr. Born, has taken notes of over seventy well marked cases during the three years that he was house surgeon at the Ophthalmic and Aural Institute. The great majority of those cases, as well as others in my private practice, were cured under the above plan of treatment, persistently carried out. What good the same plan, though less rigorous, may do in severe cases of trachoma, few persons who have not witnessed it would believe. A patient may go for months, and even years, to the dispensary, and then show the usual alternation of better and worse, till a new crop of granulations, or blindness from corneal opacity, compels him to enter the hospital. He is treated with iced compresses several hours during the day, is directed to dip his face into cold water, and is admonished by every moral effort, assisted, if necessary, by mechanical appliances, to keep his eyelids open as much as possible; his lids are touched with the sulphate of copper crystal, and the improvement in most cases is very marked, not to say astonishing. In the course of three or four months I have seen trachomatous lids restored to a healthy condition, with scarcely perceptible cicatrices, and a trachomatous cornea, through which fingers could not be counted, so much clear up that fine type could be read.

What I have said is only a sketch, and if I did not trespass on your time and indulgence, I would fain say more, for I am deeply impressed with the fact that among all questions in ophthalmology—that of cataract, perhaps, excepted—there is none so important as the treatment of contagious ophthalmia."

(To be Continued.)

—M. Gibony has discovered that healthy rabbits become tuberculous if exposed for some time to air expired by animals in a consumptive state; but if this air is charged with carbolic acid it does not produce the disease.

Correspondence.

Cinchonidia as an Antipyretic.

Ed. Med. and Surg. Reporter:—

During the last session of the Alabama State Medical Association, in Mobile, Dr. George A. Ketchum, of Mobile, the leader of the Omnibus discussion, a notable feature of our meetings, presented, as one of the topics for open and general discussion, quinine, which was ably and elaborately treated in its practical bearing by him. The value of cinchonidia was also presented by some of us who had large practical experience in its use, comparatively with quinine.

The question was asked as to its antipyretic value. It will be answered briefly, from one point, by referring to an aggravated case of double pneumonia, in a young negro man, whom I saw on the 17th of May last, the worst case of the worst disease the black man has to contend with, that I have, in more than 26 years' practice, seen recover. Those who have long been accustomed to treating pneumonia in the negro, know its great fatality, much, very much, greater than in the white. Realizing the fact, and inferring the cause, I was readily able to attach great scientific and practical value to the first article that I ever saw which demonstrated, beyond doubt, by many post-mortems, the true cause, which was found to be the greatly smaller lung capacity, proportionately.

This article was by Dr. A. W. McDowell, in the *Practitioner* of September, 1874, and was reprinted in *Compendium* of January, 1875. At different times I have called attention to the fact as corroborating my own views, and credit has been given to me in some elaborate articles, particularly in one by Dr. Alex. Rattray, of San Francisco, in a careful, and certainly, very able article on the "Physiology of Climate, Season, and ordinary Weather Changes." I take this occasion of disavowing the original presentation of the matter. The credit is due to Dr. McDowell, the result of many post-mortems by him at Benton barracks, giving us light, based on anatomical observation, that cannot be gainsayed, and entitles him, justly, to great credit for his thorough work and necessary practical deductions, which give us an infallible guide in the general treatment of our cases.

This man, a laborer on the railroad, had been brought home the day before I saw him, then sick six days. At 9 A.M., on the 17th, I found him with a double pneumonia, stupid, tongue red, disposed to be dry, very deaf, scanty expectoration, and that almost black; pulse 100; temperature 104½°; abdomen slightly tympanitic, not tender nor even the bowels loose. He had, for the next twenty-four hours, 20 drops of turpentine every three hours; occasional small doses of Dover's powder, to control the harrassing cough, with what I rarely ever use in the negro, and especially this late, veratrum, in small doses, every three hours, used simply as a depurant in its action on the kidney.

At 9 A.M., 18th, pulse 108; temperature 105°; respiration very rapid. He was then ordered at once a prescription which was continued as long as any medication was needed.

℞. Potass, iod., gr.lxiv.
Water, f℥j
Sp. lav. co., f℥iij
Glycerine, q.s. ft. mist., f℥ij. M.

Sig.—Teaspoonful every four hours.

To each dose was added, when given, twenty drops of turpentine, this to be omitted when the kidneys were affected. Dover's powder mixture, as needed, to control cough. Buttermilk and lemonade freely. At 5 P.M. temperature was 104½°; same general symptoms. In addition to above treatment, was ordered twenty-five grains of cinchonidia, at 4 A.M., 19th inst. At 8 A.M. pulse 100, temperature 101°, respiration 42, tongue red, rather dry. Treatment continued. At 4 A.M., 20th, he had fifteen grains cinchonidia; at 8 A.M., 20th, pulse 88, temperature 100°, respiration 40. At 4 A.M., 21st, he had the same dose of cinchonidia; at 8 A.M. pulse 88, temperature 99¾°, respiration 32. At 4 A.M., 22d, fifteen grains of cinchonidia; at 8 A.M. pulse 76, temperature 99½°. At 4 A.M., 23d, he had fifteen grains of cinchonidia; at 8 A.M. pulse 72, temperature 97¾°, respiration 24. From this time no regular record was kept, and save a complication of rheumatism of the left hip, he went on to steady convalescence, and this morning was able to walk to my gate to inform me of the birth of a son. He did not desire whisky or any stimulant, and had none. Lived for two weeks, or more, exclusively on buttermilk, which he had in large quantities, the alkaline condition of the blood creating a craving for this acid nutritive. This case very plainly answers the question as to the value of cinchonidia as an antipyretic in a disease which sorely tries all our skill and resources. The iodide of potash has its decided and distinct value in the second stage of pneumonia, and I was more particularly led to its use from the fact that typhoid fever has been endemic with us for more than a year, and all diseases tend to low form. I had many years ago heard of the use of iodide of potash in typhoid fever, but the first case that presented itself, in a child of rheumatic antecedents, I was compelled to use it, which I did solely, through the disease till convalescence.

I have treated twenty-three cases in a little more than a year. It is now my general custom, when I cannot conveniently or properly use the treatment suggested by me in the Reporter of April 20th, 1872, and recently advised again at the last session of our State Association, to give in these cases, every four hours, full doses of the syrup of lacto phosphate of lime, and between each dose, to an adult, four grains of iodide of potash dissolved in a teaspoonful of glycerine, to which recently I have also added, with very satisfac tory results, at the suggestion of Dr. Moody, of Pickens county, Alabama, with each dose one or two drops, according to the gravity of the case, of carbolic acid, strong, the crystals. At the time of reading I was greatly impressed with the immense practical value of the article on "The Thermometer and its Use in Medicine" in the Reporter of February 11th, 1882, by Dr. Hugo Engel, which every young physician, and old one too, for that matter, that can get it, should read, and read, and re-read, and fix in the memory.

Recently, in a severe case of typhoid fever in the third week, a black woman, the morning thermometer read 104½°; very sick. The next morning at the same hour it read 100°; too rapid a fall to bode any good. Like the barometer, foretelling the storm, I felt satisfied mischief was coming and that I might look out, with almost unerring certainty, for a hemorrhage from the bowels. To the treatment of iodide of potash and carbolic acid and turpentine in twenty drop doses, which I always add on first approach of dry tongue, I added at once a decided hypodermic of morphine, enjoined perfect quiet, artificial warmth, whisky freely, and ten grains of Dover's powder after every action. Sure enough it came, and came with a rush, in twenty-four hours. The above treatment, with perfect quiet, tided her through this peril, which gave way on the fourth day, and she went on to convalesce. This instructive case is simply added to the above to enforce the necessity of the use of this instrument of precision, without which we must be very often in the dark as to our diagnosis, prognosis and treatment.

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Medical and Surgical Supplies on Railroad Trains.

Ed. Med. and Surg. Reporter.

Your very timely articles in two late numbers of your journal, calling the attention of railroads and the public to the want of proper medical and surgical facilities in case of accidents upon railroad trains, were read with interest.

The subject has come to my notice upon two or three occasions in particular. I am well pleased that you have taken up the consideration of the matter, and trust that your efforts will not cease until some proper action has been taken by the railroad companies, or legislation enacted by the proper law bodies.

Within the past year I have had two very striking illustrations of the importance of having upon railroad trains, and within easy reach, certain medicines and appliances, in case of accident.

While running at quite a speed, along a prominent railroad, the engineer of our train spied a man lying upon the road between the two tracks. The night was dark, and it appeared that a train going in the opposite direction had run into this person, who was walking on the track, on his way home from work. The accident being unperceived by the train hands, the train did not stop. For quite a while, therefore, until our train came along, did the man lie in suffering.

We were not many miles from the city, and the conductor ordered the man to be taken upon the train and conveyed to the depot.

The poor fellow was in terrible agony, and being stout and the car steps high, it was painful to witness the suffering it caused the man in the attempt to place him in the car.

Had the car been supplied with a stretcher, much time and trouble could have been saved, and the man made to feel his wounds less keenly.

Somewhat belated, the train rushed along with considerable speed, and with every motion of the car I could see that the jolting gave the man pain. We were obliged to lay him upon

the bare baggage car floor, with a chair cushion only under his head.

Not a drop of medicine or stimulant was obtainable from the train hands, to relieve pain or to strengthen him until the depot could be reached.

Fortunately, however, I had my hypodermic syringe in my pocket, with which I injected into the man's arm a quarter of a grain of morphia, which gave him some ease.

The other instance was furnished in the case of the baggage master of a train upon a branch of the same road. While leaning out of the baggage car side door, the baggage master was struck by a projection from a bridge, and his skull fractured.

I was summoned from the rear end of the train, and soon hastened to where the man lay.

Not a thing, except ice water, was on hand, excepting, too, the whole-souled willingness of all hands to do what they could; but of what avail was all this without the means of keeping up the heart impulse and strength of the patient, in hopes of eventually saving his life.

I now make it a rule never to travel without my medicine satchel and instruments. On this occasion they were, fortunately, with me. The man was pulseless; his heart beat so feebly as hardly to be heard. Another physician happening on board, and who ably assisted me in every effort, agreed with me that digitalis must be given the man or he would die before the depot was reached.

An injection under the skin was made, of a strong tincture of the drug, which I procured from my satchel, with the hopeful result of bringing back the pulse and the respiration. Thus we worked, with the medicines, etc., I had on hand.

What are doctors, in case of a need of medical aid, without medicines? What are they without the means whereby to perform the necessary preliminary work in case of accident to body or limb? In some cases useless, I say; in others their efforts are crippled.

The two cases I cite are mild; I need but mention the frightful accidents frequently occurring on railroads, far away from hamlet, village or city, with no opportunity for summoning a physician—the nearest one living, perhaps, many miles away—to show that there are times when some such thing is needed as that to which you refer—a full supply of medicines and surgical appliances, so that if doctors be present they have the means at hand for rendering the necessary assistance; or, if physicians are not near, so that the cooler and more intelligent of the train-men or passengers can contribute to the relief of the wounded until medical aid arrives.

To the list contained in your second editorial I would suggest the addition of digitalis and brandy—though no doubt, in ignorant hands, the administration of the latter to excess results in more evil than good.

In the two cases to which I refer the railroad did all they could for the comfort of the patient after reaching the depot; but how much suffering might not be saved if the measure for which you have so warmly pleaded were adopted.

Let the employés upon every railroad—one or all upon each train—be given, as part of their general instruction, some explicit directions concerning the care of the sick or wounded in case of illness or accident. A woman grows sick, and there is nowhere to lay her. In fact, there are, as a rule, *no* accommodations for the sick upon railroad trains.

Corporations governing railroads should, therefore, drill the train hands, as it is proposed to drill the police force, in the means to adopt in case of emergency, with no physician nigh, and set apart some portion of a train for the reception of the sick or injured.

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A Case of Poisoning by Brucia.

Ed. Med. and Surg. Reporter:—

I was called in haste, the other day, to see a vigorous middle-aged man, who was suffering from the effects of an excessive dose of medicine taken two hours before, after a meal, prescribed for backache by an old, irregular, occasional practitioner, who claimed to have been at one time a surgeon in the Prussian army. I found the patient with dread pictured in his face, holding by the arms of the chair in which he sat, afraid to move or be touched lest he should fall into convulsions. He had decided symptoms of poisoning by brucia, which are essentially similar to those by strychnia. An emetic was given, and after repeated doses of chloral, an anti-spasmodic, which is thought to be a physiological antidote. Two fifths of a grain of morphia was given hypodermically. In five hours from the taking of the dose (two grains) the convulsive state had largely disappeared. The prescriber claimed that his prescription was copied from a German handbook of popular medicine (published in 1840), and that only a medium dose, according to the book, had been ordered, which I found to be the case. Twelve grains of brucia and half a drachm of conserve of roses, to be made into twenty-four pills, four of which were to be taken twice a day, constituted the prescription. An ounce of ointment, containing twenty grains of veratria, was also ordered.

The proper dose of brucia is not explicitly stated in most of the books. It is placed at not more than half a grain to begin with, by some. It would seem that, as met with, it is an article of very variable constitution.

A moral: The ignorant use of powerful medicines by any one is a bad business.

Thos. S. Sozinskey, M.D.

Philada., July 29.

News and Miscellany.

Registration of Medical Practitioners in Pennsylvania.

The following is an abstract of the report of the Committee on Medical Legislation, read before the Medical Society of Pennsylvania, at its last meeting. Statistics have been collected from all the counties. In most of them registration has been completed. About 500 practitioners have not yet registered. If our Legislature could be

induced to give us a State Board of Health, with authority to supervise registration, much better results might be secured. One hundred and five females have registered.

NAMES OF SCHOOLS.	NO. OF GRADUATES.
University of Pennsylvania	1356
Jefferson Medical College	1695
Pennsylvania Medical College	150
Woman's Medical College	60
Hahnemann Medical College	287
Homœopathic Medical College	115
University of Philadelphia	10
Penn Medical University	5
Phila. University of Medicine and Surgery,	63
American University of Philadelphia	19
Eclectic Medical College	71
Philadelphia Electropathic Institute	4
Franklin Medical College	4
Penn Medical College	33
Penn Medical Institution	4
Philadelphia College of Medicine	16
Medical College of Pennsylvania	10
Philadelphia Medical College	33
Medico-Chirurgical College	4
Female Medical College	3
Allentown Medical College	1
Eclectic Medical Association	1
	3947

The following were graduated by schools in other States:—

NAMES OF SCHOOLS.	NO OF GRADUATES.
Bellevue Hospital Medical College	175
University of Maryland	95
University of New York	53
University of Michigan	95
Coll. of Physicians and Surgeons, Baltimore,	125
Rush Medical College	16
Long Island Medical College	39
Western Reserve Medical College	91
College of Physicians and Surgeons, N. Y.,	28
University of the City of New York	51
Cleveland Medical College, Ohio	74
University of Vermont	12
Central Medical College, Rochester, N. Y.,	6
Dartmouth Medical College	6
University of Buffalo	67
St. Louis Medical College	4
Chicago Medical College	7
Bowdoin Medical College	4
Columbia Medical College, New York	9
Detroit Medical College	10
Coll. of Homœopathic Phys. and Surg., Mo.	4
Homœopathic Medical Coll. Cleveland, O.	34
New York Homœopathic Medical College	20
Homœopathic College, Ohio	15
Hahnemann Medical College, Illinois	10
New York Medical University	3
University of Louisville, Kentucky	61
Albany Medical College	24
Wooster University	40
New York University Medical College	5
Harvard Medical College	10
Washington University, Baltimore	22
Miami Medical College	34
Medical College of Ohio	30
Cincinnati College of Medicine and Surgery.	31
Cincinnati Medical College	14
University of Georgetown, D. C	5
Starling Medical College	11
Kentucky School of Medicine	7
Eclectic Medical College	39
Pulte Medical College	8
Eclectic Medical Institute, Ohio	32
American Medical College, St. Louis	4
Coll. of Physicians and Surgeons, Keokuk	6
Physio-Medical College, Cincinnati, Ohio	11
Eclectic Medical College, New York	22
University Medical College, New York	6
United States Medical College, New York	8
Hygeo-Therapeutic College, New York	7
Georgia Eclectic Medical College	1
Memphis Medical College, Tennessee	1
St. Louis Coll. of Physicians and Surgeons	2
Willoughby University	3
Missouri Medical College, St. Louis	2
University of Tennessee	1
Detroit Homœopathic Medical College	1
Medical College of South Carolina	1
Atlantic Medical College	1
Phisic Medical College	3
University of Cincinnati, Ohio	1
National Medical College	6
Botanic Medical School, Ohio	2
Geneva Medical College	17
Rensselaer Medical College	1
Buffalo Medical College	8
Berkshire Medical College	10
Fairfield Medical College	1
Louisville Medical College	4
Columbus Medical College	13
University of Cleveland	1
Columbian Medical College, D. C	5
Castleton Medical College	14
Medical College of Virginia	1
Williams College, Massachusetts	2
Charity Hospital Medical College	4
Washington Medical College, Baltimore	3
Georgetown Medical College	6
Lind University, Illinois	1
Iowa State University	3
Medical Department, Transylvania	1
New Orleans Medical School	1
University of Boston	4
University of Nashville	2
Yale Medical College	9
Georgia Medical College	1
Metropolitan Medical College	3
University of Geneva, New York	4
Medical and Surgical College, New York	1
Howard University, D. C	3
Woman's Medical College, New York	1
Hygeo-Therapeutic College, N. J	4
Castleton University, S. C	1
Baltimore Medical College	1
University of Virginia	2
New York Medical College	3
University of Hudson	1
American Health College, Ohio	2
Savannah Medical College	1
Vermont Medical College	1
Unintelligible	5
	1610

Graduates of schools in foreign countries:—

NAMES OF SCHOOLS.	NO. OF GRADUATES.
University of Edinburgh	2
University of Glasgow	4
University of Wurzburg	9

University of Dublin	1
University of Gottingen, Germany	7
University of Tübingen, Germany	5
University of Marburg, Germany	1
University of Freyburg, Germany	1
University of Leipsic, Germany	2
University of Vienna, Austria	3
University of Frederick Wilhelm	2
University of Victoria, Canada	3
University of Jena, Germany	3
Julio Hospital Medical College	1
Georgia Augusta Medical College	1
Monz Medical College, France	1
Queen's College, Ireland	3
Gratz Medical College, Austria	1
Zurich Medical College, Switzerland	1
Royal College of Surgeons	2
Hebamman Medical College	1
Midwife Institute, Baden	1
Berlin Anatomical Academy	1
University of Berlin	2
University of Heidelberg	1
Germania University	1
Royal College of Medicine, Edinburgh	2
College of Phys. and Surg., London	1
Trinity College, Toronto, Canada	2
College of Herford, Germany	1
Germania Medical College, Vienna	1
Academia Ludoviciana	1
Ludwig Maximilian University	1
Royal College of Surgeons, Ireland	6
Royal Bavarian School of Midwifery	2
Medical College of Stuttgart, Germany	1
University of Strasburg	1
Eclectic Medical College, Toronto	1
University of Prague	2
University of Geisen, Germany	1
University of Kiel	1
University of Amsterdam	1
M'Gill University, Canada	1
Vienna Medical College	1
University of Buda, Pesth	1
Aberdeen Medical College	1
University of Erlangen	1
University of Königsburg	1
University of Breslau	1
University of Munich	1
	97
Non-graduates registered	838
Whole No. registered under the Act of 1881,	6492

Carlisle, Pa. R. L. SIBBET, *Chairman.*

Professor Billroth Declines.

In June last Professor v. Langenbeck, who, as well known, has resigned his position as Professor of Surgery at the University of Berlin, wrote to Prof. Billroth, in Vienna, offering him the chair Langenbeck for so many years occupied. Billroth declined. The Royal Society of Physicians in Vienna held a meeting and authorized Professor Dittel to thank Billroth, in the name of his colleagues, for having preferred Vienna to Berlin. To this Prof. Billroth gave the following answer, which we translate from the last number of the *Deutsche Med. Zeitung*:—

"I thank you for your kind expressions, and can only assure you that I did not reflect long about my duty. I am in so many ways intimately attached to Austria and Vienna that I was forced to decline, notwithstanding the brilliant offers, and, I might well say, notwithstanding the great honor and distinction of my teacher selecting me out of all his pupils as his successor; and I must confess that, for a moment, it seemed to me hard to refuse him anything. But I was soon resolved, and stay here with all my heart."

The students of the Vienna University had a torchlight procession in honor of this action of their Professor. The medical world will be sorry, because Billroth would have had a far larger field and greater means for exhibiting his skill in Berlin, which at present is ahead of Vienna.

Effects of Intermarriage.

Some recent researches of Dr. Herrmann show that there is no connection between the number of marriages between blood-relations and the number of instances of cretinism. Marriages between blood-relations appear rather to diminish than to increase the tendency already present of producing cretinism. On the other hand, idiotism may be, and appears to be, produced by such marriages; *e. g.*, Howe records seventeen cases of marriages between blood-relations producing 95 children, of whom 45 were idiots, 12 scrofulous, 1 deaf, and 1 dwarfed.

Items.

—The ethnological museum organized at the "Trocadero," in Paris, possesses 44,000 specimens.

—The cinchona bark plantations in the Island of Jamaica were able to supply, last year, 24,000 pounds of bark.

—It has been found that the current between the poles of an electro-magnet has the property of delaying fermentation and putrefaction.

—The most certain remedy for toothache, and one that is said never to fail, is the following: Saturate a mixture of alcohol and ether with N_2O; a few drops of this applied, on cotton, to the tooth stops the pain immediately.

—The vacancy created by the resignation of Professor Langenbeck from the chair of surgery, and as director of the surgical clinic at the University in Berlin, will probably be filled by the appointment of Professor Volkmann, of Halle. He is, at least, the only one who will be nominated for this important position by the Medical Faculty of the University. Professor Volkmann has especially become known by his "Sammlung Klinischer Vorträge" (collection of clinical lectures,) which have found many readers also on this side of the Atlantic.

DEATHS.

BREHMAN.—Suddenly, on July 20th, 1882, of neuralgia of the heart, Dr. G. Edmund Brehman, of Altoona, Pa.

ELLIOT.—At Peabody, Mass., July 26th, 1882, Dr. Daniel M. Elliot, aged 39 years.

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Communications.

THE INNOVATIONS OF MEDICAL AND SURGICAL PRACTICE.

BY J. M. F. GASTON, M.D.,
Of Campinas, S. Paulo, Brazil.

Theory and practice should harmonize with the facts observed in the different stages of medical progress. Two extremes, alike prejudicial to advancement in science, are notable at present, being an undue regard for the remote past and an anxious craving for novelty on the part of the medical profession. The statistics of bygone days, so far as they have been carefully and judiciously collected, must have an interest for all time, as a basis of comparison with similar data which have been since presented. But when the inferences drawn from past periods by contemporaneous observers without the lights reflected by subsequent investigations are brought to operate upon this era, it must be evident that they cannot contribute materially to the formation of a correct opinion upon any general principles in practice. Facts which are well authenticated must serve as a basis upon which to erect the superstructure in any department of knowledge for after ages, and the only question in this case for investigation is the competency and honesty of the individual observing and recording such data. We must have a voucher for the character of the witness. As we cannot rely upon the reports of those who are not educated and accustomed to the use of the ophthalmoscope or the microscope, as to the characteristics of the structures which are the subjects of examination with these instruments, so it may be held that the untrained exercise of the senses of sight, hearing and touch may be deceptive and not trustworthy, however sincere the observer may be in seeking information, and whatever may be his good faith in communicating these seeming realities. Thus it turns out that many apparent facts of the early history of medicine cannot be accepted as genuine; and the proneness to refer to such observations as testimony of what was learned by our forefathers, shows a want of discrimination between the real and fictitious in clinical experience. Before the discovery of Harvey, for instance, what significance could any accidental counting of the pulsations of the wrist have, in elucidating a febrile or inflammatory disease? and yet it is a very supposable case, that, without recognizing the standard of health or giving the number of beats per minute, such an observer should describe the pulse as slow or frequent; thus, for lack of the requisite knowledge, giving no indications upon which to form an estimate of the real state of the circulation. On the other hand, if, in connection with a casual count of the pulsations, it was noted that it beat eighty, a hundred or a hundred and twenty times in a minute, it would constitute a well defined element in the history of such case. In other words it would be a fact within itself of specific value, and hence worthy of being perpetuated by record.

Although many original special observations are recorded on the part of the pioneers in the vast field of medicine, yet comparatively few of those disjointed data serve to enlighten the medi-

cal philosopher of the present era as to the principles which operate in the performance of the healthy functions, or to assist the pathologist in solving the disturbances of the physical organism. It is, therefore, unprofitable to array the vague conceptions of these early dreamers in the way of precedents for theory or practice in the light of the advancements in medical science; and the quotations of such authorities in standard treatises or in elaborate articles upon any special subject, has no practical end, nor can it serve any purpose for our improvement. Those who desire to display their researches in the lore of Hippocratic medicine remind us of the diligent collector of fossils which interest by their antiquity, yet shed no beam of light upon passing events. They serve simply to illustrate what has been, without giving us any clue to what should be under the changed order of things; and it is surprising that a plea should be made in behalf of any proposed modification upon the effete hypothesis of abandoned vital theories, that should serve as lighthouses to guard us against breakers that may wreck our vessel of progress. The fathers of medicine may be cited as striking instances of absurd doctrines that have been discarded, but never as examples for our imitation or as guides for our advancement in the practical department of medicine.

Turning to the other extreme, of a penchant for novelties in medical development, we are as little benefited by the ignus fatuus light of the present, as by the spectres and ghosts of the past. The true spirit of inquiry which leads to thorough examination of any measure before adopting it in practice, is to a great extent laid aside by the eager disposition to do something new; and while the initiative element accompanied by a wholesome caution is a proper characteristic of true investigation, this feature of innovation upon recognized modes of proceeding without such precautions, is destructive of the entire framework, which has been the gradual growth of experience and induction. The desire for change simply on account of the change from stereotyped forms is unphilosophic and inexpedient, yet many of the younger members of the medical profession at the present day are prone to seize upon recently proposed modes of treating diseases and new processes in the performance of surgery, without due thought as to the matter of improvement. The taste displayed in the selection of elegant preparations is not always accompanied, as it should be, with a consideration of their efficiency, and as these specimens, so nicely put up, are intended to captivate the eye, it often turns out that they are comparatively inert. It is not by any means objectionable that medicines shall be presented in a form that is acceptable to the stomach, yet this must not be done at the sacrifice of energy in its effect upon the general system.

Certain combinations which were formerly in good repute for the attainment of definite results, are now considered as old-fashioned remedies; such as castor oil with spirits of turpentine, jalap and cream of tartar, snakeroot of Virginia and epsom salts, calomel and aloes, ipecacuanha and tartar emetic, digitalis and squills, sarsaparilla and iodide of potash, assafœtida and camphor, acetate of lead and opium, valerian and hartshorne, linseed oil and lime water, ergot and cinnamon, etc., etc. In lieu of these commonplace articles there have been introduced latterly a great many potential substances that have had a larger share of the attention of practitioners, including bromide of potash, bromide of camphor, chloral hydrate, salicylic acid and its salts, carbolic acid, pilocarpine, podophyllin, cundurango, coca, mannita, chian turpentine, iodoform, pancreatine, listerine, duboisine, methylene and a vast collection beside, with the overshadowing foliage of the eucalyptus. We may question the propriety of setting aside remedies of solid worth and tried virtues for others that are more palatable to the patient or more readily manipulated by the druggist, and the wisdom of sacrificing the certain action of medicines to the charm of novelty or the elegance of preparations, as in such articles as the wine of cod liver oil and wine of peptone, in which the original properties are so modified as no longer to secure their proper influence upon the organism. Whoever abandons the reality for the shadow of medication is making a retrograde movement.

The propagation of the influence of medicinal substances to the organism has been undertaken in a variety of channels, yet none have proved so efficient as the hypodermic medication; and while this was adopted long ago with a few articles, it has been so extended of late as to entitle it to a place among the novel improvements of the age. Morphine and quinine have been resorted to for many years by their subcutaneous injection, with the happiest effects; ergotine and pilocarpine have gradually come into general use by the same process; while ether, brandy and aqua ammonia bid fair to maintain their place among the useful applications in this form. But the preëminence given latterly to the use of carbolic acid by subcutaneous injection claims something more than a passing notice. Thus

applied, it effectually arrests erysipelas, and ensures the resolution of glandular tumors, especially in the inguinal region; affording likewise the surest guarantee for the disorganization and removal of hemorrhoidal excrescences. My individual experience sustains all the most favorable claims that have been proffered by different observers of its salutary effects in their several modes of application, and I am prepared to expect yet greater advantages from the extension of its use to other forms of disease. The grandest achievement, however, for hypodermic application, is the very recent employment of the permanganate of potash in this way, as an antidote to snake poison; and the instances have been so multiplied as to leave no doubt of the efficacy of this magnificent discovery.

There has been no period in the history of medicine when the utilitarian element played so conspicuous a part in therapeutics as at present, and the why and the wherefore are swallowed up by the recognition of the fact, in the benefit conferred by any special mode of treatment. Theory is held to be secondary to practical results, in determining upon the acceptability of a proposed measure; and if an accumulated series of experiments satisfy us that in a given combination of symptoms a uniform salutary modification may be secured by a certain routine treatment, it is clearly incumbent upon the physician to adopt it, though the rationale may not be well understood. As a homely illustration—if it is found that hiccough, as it ordinarily occurs, is invariably relieved, by swallowing in measured draughts a glass of sugar and water, who would think it requisite to investigate the philosophy of this simple process before using it. It is, of course, all very well when our theory can go along with our practice, yet experience is, perhaps, the basis of the most valuable resources in our profession, and nothing should be rejected because it does not admit of a rational explanation. Emphatically, the practitioner may say: "For that which I do I allow not; for what I would, that I do not; but what I hate, that I do." When we are assured that thus saith the record of intelligent observation, we must, "nolens volens," put the measure into execution; and the "test of experience" is, for the most part, a correct guide in practice.

That etiology, pathology and therapeutics should be studied and form the basis of all treatment of disease, and that theoretic deduction and induction are important to an intelligent application of the appropriate remedies, does not in any form militate against the utilizing facts analogically, by inference from what has been presented to the recurrence of the same effects under similar circumstances. The relation of cause and effect may be clearly established without understanding the conditions of the sequences; and medical men should not be over nice in exacting a minute comprehension of the mode in which the curative influence of medicines is effected. If a patient suffers from intermittent, and takes quinine in sufficient doses, the disease ceases to appear, yet we may not have a clue to the precise operation of the medicine in securing this result, while reason and common sense tell us that it is rational and even scientific practice.

This empirical treatment of disease is not at all inconsistent with the thorough comprehension of all that is attainable in regard to the theory of medication, and far be it from me to raise any barrier to the investigation of the principles that should regulate the application of means for the correction of the disorders of the animal economy. The noblest aspiration of the scientific physician in his search after truth, should be to fathom the intricacies of diseased action upon the organism, and the hidden modifications of these disorders by medicinal agents, and establish, so far as may be practicable, a rational solution of their relations.

There has, undoubtedly, been important discoveries in the therapeutic appliances during the last quarter of a century; and the experiments of new remedies have added valuable agents to the materia medica, that are as fully entitled to a permanent place in the list of medicines as any which have been in use for a longer period. Yet it must be admitted at the same time that others of a mere fanciful character have had a dazzling reputation without substantial merit.

The fruitless attempts to replace chloroform and sulphuric ether as anæsthetics, illustrates most forcibly the restless seeking for novelties; and the percentage of fatal results from the limited experiences of a few individuals in this wild chase of a will-o the-wisp, should serve as a caution to the conservative practitioner, and make him contented to let well enough alone.

Reform of abuses in every phase of medical and surgical applications, has been a marked characteristic of the last decade, and perhaps in nothing has it given better fruits than in the adoption of antiseptic processes; yet the admixture of error, even in this, has become apparent very recently, in the discovery that the carbolic acid spray, instead of being advantageous, has been prejudicial in the large majority of cases, if not, indeed, generally, in surgical, and especially in gyneco-

logical operations. This wonder of an hour kept the profession spell bound under the influence of a great name, but the bubble has bursted under the touch of another equally conspicuous.

We find that even the domain of obstetrics has been invaded by the latter-day innovators, and the best established rules for the guidance of the accoucheur are proposed to be set aside; as, for instance, in omitting to use the catheter for evacuating the bladder before applying the forceps, and in the substitution of chloroform, avowedly free from danger in parturition, by the less manageable resort to laughing gas, which should cause a smile of derision by every obstetrician who has occasion to adopt an anæsthetic in these cases. And it has been gravely recommended, in cases of adherent placenta, to produce that most grave of all displacements of the womb, inversion, for the purpose of facilitating the speedy and complete detachment of the adherent mass. It is a notable suggestion, which should be observed in its avoidance by all obstetricians.

In gynecology, which, as now presented, is a grand novelty, there is no calculating at what point the innovations will find a limit, and the opening of a woman's abdomen will perhaps ere long be resorted to with as little ceremony as an examination per vaginam with the speculum was made twenty years ago. Laparotomy has even been practiced as a means of diagnosis, in advance of any positive indication for this procedure as a curative process. Far be it from me to detract from the well earned fame of those who have been prominent in boldly pushing forward improvements in this department, yet it must be admitted that some have overleaped the legitimate bounds of a wise discretion in making human vivisections.

A few years since I was present when an exploratory incision in the linea alba was made by one of the most distinguished gynecologists of the present age, the cavity being opened to verify the nature of the cause for discomfort in the hypogastric region, from which the lady had suffered for some months previously. The bladder, uterus and ovaries being examined, a slight puncture was made in one of the ovaries, from which about a teaspoonful of serous fluid was discharged and the abdomen was closed with silver wire sutures, thus closing an operation to all appearance that had no other result than to enable the surgeon to determine whether any abnormal adhesions of adjacent organs required division. It was the good fortune of the operator that the lady, whose position in society would have attracted criticism, escaped without any serious consequences of this intra-peritoneal exploration. The high reputation of this prominent surgeon might warrant such a proceeding, but it certainly should not be imitated by those of lesser fame.

There seems to have sprung up within ten or fifteen years a sort of monomania for gynecological investigations, extending to the younger men who have entered the ranks of the medical profession latterly, and it is to be apprehended that the attractions of this specialty may seriously interfere with those acquirements which are requisite for the general practitioner. A Spencer Wells, a Keith, a Sims, a Bozeman, and an Emmett, with other notables in this department, by publishing their grand achievements, have turned the heads of the rising generation of medical men toward gynecology. The injurious effect, in a literary collegiate course, of neglecting some text-books and giving exclusive attention to others, is more manifest in the consideration bestowed upon a special branch, to the neglect of the more important topics in the curriculum of the medical student. It is a grand mistake, in entering upon the preliminary departments of medical knowledge, to devote special study to those matters which are supposed to fit the student for a specialty, let that be in whatever direction his inclinations may point. In like manner, it must prove a drawback to proper professional development, for one entering upon practice to limit the area of his services to one isolated class of diseases, as the mutual relations of parts involve so many reciprocal actions and reactions, that a general acquaintance with the disorders of the animal economy is requisite for a full comprehension of any particular disease. There cannot arise the same impediment to a selection of the medical or surgical field of service at the outset, for there is a radical distinction in the qualifications requisite for the one or the other department of duty, and if an individual is conscious of a decided proclivity in either way, there can be no objection to following his own inclination when he enters upon the practical duties of his profession. The rock upon which young men are in danger of foundering is to allow the magnificent attainments of gynecologists to captivate them in such a way as to divert their investigations from other topics essential to success as practitioners.

While many new modes of treatment, medicinal and surgical, have stood the test of practical application for a series of years, others have, after

a brief career, been found wanting in the essentials for adoption in regular practice. Among these, it is matter of great regret that a new process which promised so much at the outset as nerve-stretching, should have been doomed to rest in the tomb of the Capulets, with such pall-bearers as Socin, Langenbeck, Billroth, Weiss, Bergen, Benedict and Althaus.

It is to be hoped that the reunion of divided nerves may not have the same fate, yet the statistics are as yet too limited to furnish any guarantee for its final triumph.

(To be Continued).

A NEW FORM OF SPLINT FOR FRACTURE OF THE PATELLA; AND REPORT OF A CASE.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

It is quite needless to inform any surgeon that the maintenance of the widely separated fragments in apposition, in fracture of the patella, is a desideratum devoutly desired. However easily steady apposition of fragments of bones may be attained in other fractures, this is one where the maintenance of apposition long enough to secure osseous union has persistently defied all skill in all time past. Bony union has been, and is now, the exception and not the rule.

The causes of failure are very apparent, *i. e.*, the traction of the quadriceps extensor muscle drawing the upper fragment upward, and that of the ligamentum patella, if not drawing the lower fragment downward, at least does not hold it up to its proper place.

Now, it is easily noted that the insertion of the quadriceps extensor into the patella is by a fleshy tendon as broad as the superior border of the patella, and that that insertion of this muscle is as thick as the bone itself. So that the upper surface of insertion of this muscle is on a plane with the upper surface of the patella, thus leaving no projection or shoulder against which a splint may be braced and permanently fastened, in order to hold the upper fragment down to its place. Again, the layers of fascia and integument, not always thin, which cover the upper border of the patella, add to the difficulty of pushing down the upper fragment, or of holding it down, very materially.

Again, any considerable pressure by any splint heretofore devised (as far as my limited knowledge goes) has a noted tendency to tilt up the lower margin of the upper fragment, and thus defeat accurate coaptation. The reason for this is plain. Pressure brought on the upper border of the patella must be had by pressing the quadriceps extensor backward at its point of insertion. This necessarily carries the upper border of the bone backward, and therefore tilts the lower edge of the upper fragment forward. The anterior plane of the insertion of the muscle and of the anterior surface of the patella being quite exactly the same, it must necessarily be the case that any considerable pressure at the upper border of the patella must be had at the expense of pressing the tendon backward; but as the insertion is broad, thick and dense, and its reflex contractile response to pressure quite considerable, it becomes at once impossible, or next to impossible, to secure a sufficient projection or shoulder at the superior border, against which to press with a splint in order to bring down and hold down the upper piece of the broken bone.

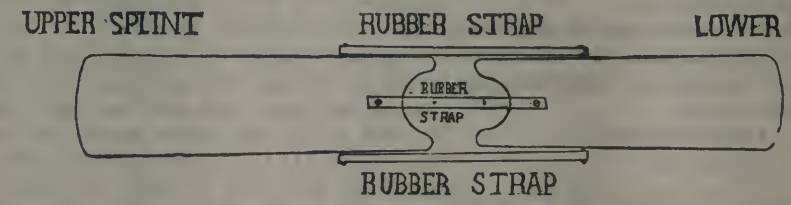
The ligamentum patellæ below offer very similar reasons for inability to hold the lower fragment up, but not to the same extent as the quadriceps extensor above.

To obviate this difficulty, I have devised a splint made to bring pressure to bear on the lateral margins of the bone, where, as will be seen by the shape of the patella, sufficient shoulders may be found against which to press the splints with as great force as may be needed to bring the fragments together. True, the tendons of the vastus internus and vastus externus muscles extend to those lateral margins to a small extent, but not sufficiently to interfere greatly with the mechanism of this splint. The splints may be made of wood, hard rubber or wire. If of wood, take a pine board one inch thick, three or three and a half inches wide. The lower end should be narrowed to a little over two inches. Now groove out one surface deep enough and broad enough to let the tendon of the quadriceps fall into it. Let the groove become gradually more shallow from the lower end upward. Now make a round notch in the lower end, of just such size as that the sides of this notch will fit on the shoulders or lateral projecting margins of the patella, and at the same time be free from pressing on the upper border where the tendon of the quadriceps extensor is inserted. The whole of the pressure will thus be brought against the comparatively projecting sides of this rather double wedge-shaped bone. And no pressure will be had at the upper edge of the bone to cause tilting of the fragments by pressure on the muscular tendon. The lower splint should be made in just the same

way as the upper, only the groove must be deeper and the notch more pointed, to fit the wedge shape of the lower half of the bone. The corners of the board may be rounded off and smoothed up, so as to present a neat and workmanlike appearance, and take away much unneeded bulk and weight.

under the anterior elastic strap and bring them down to their proper place. Or a small strip of whalebone may be bent and slipped through the notches into the grooves after the splint has been applied, and kept there to steady and hold level the fragments.

This splint, by virtue of its reaching well down



There should be screws set into the sides of each splint, two inches or more from the ends, one on each side of each splint, and also one on the top of each splint, in the middle, at about the same distance from the margin of each notch, six in all. To these may be attached elastic rubber straps of sufficient strength to overcome the contractile power of the resisting muscles, and so attached as that they will be tightly stretched when applied. A very moderate continued pressure from these elastic straps will in a few hours overcome all the resisting power of a strong quadriceps muscle, as the muscle will become exhausted and cease to resist the strain brought upon it.

Called to a case of transverse fracture of the patella, how should we apply these splints? First have these splints well and carefully made to fit the patella. Always be sure that the ends of the two splints on each side of the notches do not come quite together when properly applied, and that they fit down on each side of the patella neatly and smoothly. Now secure a long splint for the posterior surface of the limb, reaching from near the gluteal crease to the lower third of the gastrocnemius, or near the heel; pad it well, especially just behind the knee. Also pad the anterior splints above described. Apply the posterior splint and the lower anterior splint, securing them well by a roller. Now tie a strap around the upper end of the long splint and thigh. This steadies the long splint in its whole length. Now bring down the upper fragment of the patella, apply the upper anterior splint and bind it with a roller bandage. If well applied, we believe the edges of the bone will be coapted and retained in place, or will be brought down by the steady pressure of the elastic bands. If now we find the fractured edges of the bone are tilted up we can put a thin or thick pad, as may be needed, over the lateral borders, will also be well adapted to the management of other fractnres of the patella than those that are simply transverse. In a longitudinal fracture the fragments will be more readily held in apposition by it than would the fragments in the more difficult form above named, and for which this splint was especially devised.

The advantages claimed for this splint are (*a*) the groove letting the tendon of the quadriceps extensor in, thus relieving the extensor border of the patella from pressure that is sure to tilt the upper fragment; (*b*) the pressure brought to bear on the free lateral borders of the bone; (*c*) the reasonable certainty of holding the bone in its place; (*d*) and last, but not least, the continued tension of the elastic straps that keep up continued tension and persistently resist the contractions of the quadriceps extensor muscle. Also in longitudinal fractures or in stellated fractures its tendency to hold the fragments in apposition, by virtue of the pressure on the lateral borders.

Case of Transverse Fracture without Separation of Fragments.

In this connection I wish to relate briefly the history of a case of transverse fracture of the patella, occurring in my practice in December, 1872, and which needed no splint whatever. The report of this case was published in the *American Journal of Medical Science*, April, 1873, p. 429.

Early in the month of December, 1872, Mr. Silas Julius, aged fifty-one, a stout, muscular colored man, while walking on the ice, slipped and fell heavily on his right knee. He felt considerable pain and weakness in the joint, but arose and walked to his house, a short distance from where he fell. I saw him the next day and found a transverse fracture of the patella. The fragments were still in close contact; the lower

edge of the upper fragment being tilted up to a noticeable extent, but not down away from its fellow in the least.

The patient was sitting in a chair, limb semi-flexed. When the limb was flexed so as to put the quadriceps on the stretch, the fragments came into exact apposition; but if the limb was extended, the upper fragment would override the lower and project above it the full thickness of the bone. No splint was applied, but the limb left flexed at nearly right angles and ordered to be kept so.

A few days later, Dr. E. C. Fisher, now of Racine, Wis. (a gentleman of ability and professional honor) came to see it with me. We found a disobedient patient. He had been up, walked about, and was sitting up on a chair when we arrived at his house. The leg was slightly flexed. On inspection the upper fragment was found to be actually overriding the lower one.

This condition was so directly the reverse of what we usually find in transverse fracture of the patella, that we examined the case with great care and became entirely satisfied that we were not mistaken, and that the upper fragment was actually overriding the lower one. On flexing the leg, the upper fragment slipped into its proper situation, becoming at once closely coapted to its fellow below. After this the limb was kept constantly flexed until firm osseous union was effected, which was complete in about six weeks, leaving no perceptible deformity. No dressing of any kind was needed to hold the fragments together.

The history and results in this case are directly opposed to what usually obtains in such fractures. We always expect separation of the broken pieces of this bone in transverse fracture, because of the contraction of the quadriceps extensor, and from effusion into the joint.

I was then, and am still, unable to account for the want of the usual separation of fragments in this case, unless it was that the synovial membrane on its under surface, or some slight ligamentous attachment yet unruptured, bound the pieces together. No injury had been inflicted on the quadriceps muscle, nor was there any paralysis affecting any part of the extremity. I have never seen a report of any similar case. Dr. Fisher, who saw the case with me, told me that he related the case to an eminent surgeon in Edinburgh, Scotland, while there visiting the hospitals. This surgeon stated to him that there was one published report of a similar case, but I have not been able to learn where its history may be found.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology.

Reported by Wm. H. Morrison, M.D.

Prolapse of the Womb, from Hypertrophic Elongation of the Infra-vaginal Cervix—Ovarian Cyst.

Gentlemen:—The case that I shall first bring before you is one of a very interesting disease; interesting principally on account of its rarity. I think this makes the eighth case that I have seen. This is rather a large number for one physician to see. It consists in a hypertrophic elongation of the vaginal cervix, *i. e.*, that portion of the cervix which projects into the vagina. We constantly meet with cases of conical cervix, in which the neck of the womb is a little longer than natural, causing dysmenorrhœa and often sterility, but in the cases of hypertrophic elongation we have a positive growth of the cervix. In this girl the cervix is something like two inches in length.

This girl is twenty-two years old, and has for nine years suffered excruciating pain at her monthly periods. Her physician tells me that he has to give her poisonous doses of morphia before he is able to relieve the pain. The operation that I shall perform to-day will, I think, lessen this pain, but it may be necessary after the parts have united to dilate the cervical canal.

I shall now expose the parts, and as I do so, you see the cervix projecting from the vulva, resembling somewhat the male organ. I pass the sound and get a measurement of four inches. These are the cases which in times gone by were considered hermaphrodites. The cervix was considered to be the penis, and the two sexes were supposed to be combined. The same mistake has also been made in cases of hypertrophy of the clitoris. The neck of the womb is one and a half inches longer than it should be, and projects fully two inches into the vagina. The cause of the dysmenorrhœa is twofold: first this long canal, and secondly the congestion at the menses which blocks up the canal. This is the longest cervix that I have ever met with.

In operating on cases of this kind there is one source of danger. We cannnot tell how far down Douglass' pouch extends. Sometimes it is lower than normal, and in such a case there is danger of opening it. There is some prolapse of the womb and also of the ovaries, due to the weight of the cervix. I now pass a sound into the bladder, to ascertain how low down it comes. I shall amputate a portion of the cervix with a scapula. I catch hold of the upper portion of the neck with a tenaculum, to prevent it from slipping away from me. I now remove about one inch of it by a few strokes of the scalpel. The womb now measures three inches. Before introducing the stitches I shall dilate the canal a little. I shall use the sutures introduced by Hegar, a German gynecologist. The stitches are passed like the spokes of a wheel, from the mucous membrane of the canal to that of the vagina, and in that way union occurs

at the edges, and when cicatricial contraction takes place it is from within outward; that is in the direction in which we wish it, for it will thus tend to draw the os open. You see that the os represents the hub of the wheel, the outer edge of the cervix the rim, and the stitches the spokes. The union here will be slow, for I shall not be able to get the parts in exact apposition, on account of the wound being a circular one. I shall have to put in a great many stitches, and shall probably leave them in two weeks.

You see how low the womb is. Why is that? There are two reasons for it: One is that I have drawn it down, and the other is, that it has been pulled down by the weight of the enlarged cervix. The name of this disease is prolapse of the womb, from hypertrophic elongation of the infra-vaginal (or of the vaginal), portion of the cervix. That is a name which tells the whole story. I have on several occasions shown you cases where there was prolapse of the womb from hypertrophic elongation of the supra-vaginal portion of the cervix. This is the most common form of hypertrophy of the cervix.

I here show you the result. I have introduced fourteen stitches. As I say, the tendency of the cicatricial contraction will be outward, in the direction of the stitches. Although theoretically this is very good, yet practically it is not so good, because there is also some circular contraction, which tends to make the os smaller. I now push the womb high up.

After an operation of this kind you have to look out for secondary hemorrhage, for the parts, being composed of erectile tissue, are very vascular. If hemorrhage should occur, hot water (110°–115°) should be injected. If that fails, alum water should be used. The hot water will usually stop the bleeding, and does not interfere with union by the first intention. Alum does not interfere with union. I never use Monsel's solution in such cases as the present, but where the healing is by granulation, as in cancer, I sometimes employ it.

When I bring her before you, two weeks from to-day, I expect to find the womb and ovaries much higher up. The prolapse has, I think, been one cause of her suffering.

Ovarian Cyst, Probably Malignant.

The next case is one of obscure tumor, which I shall examine before you, and try to arrive at a diagnosis. She is fifty-three years old; has been married sixteen years, and is sterile. It is extraordinary how that word "sterile" enters into the history of these cases. In examining cases of abdominal tumor, fibroid tumor of the womb and cysts of the ovary, we find a very large proportion of the cases in women who are married and sterile or else are virgins, showing that the command given early in the history of the world, to "increase and replenish the earth," is a law of nature, and cannot be violated without causing some lesion.

Last February this lady first noticed a tumor in the left side, and since then she has been losing flesh. This loss of flesh may have a great deal of significance, or it may have very little. It may have been due to the worriment following the discovery of the tumor, or it may have been due to the tumor itself. The history goes on to say that "both broad ligaments are contracted. The fundus of the womb is felt high up, anterior and to the right. Connected to it by the broad ligament is a large, fluctuating mass. It has enlarged considerably during the past month."

The question which I just now asked her was a perfectly proper one, and you notice the indignant tone in which she replied, showing that she is perfectly sound upon that point. The question I asked was this, "Have you tried not to have children?" but you see she has principles on that point. I am very sorry to say that in this country principles on this subject are frequently absent.

There is evidently fluid in this tumor, and it is tender to the touch. Why is it tender? I do not know. The history of ovarian cysts is usually one of freedom from pain. When there are adhesions there may be tenderness. I also notice that the tumor is not mobile of itself. When I move it I also move something to which it is attached, which is the broad ligament. This must be either an ovarian cyst between the two layers of the broad ligament, or else a broad ligament cyst. These are different cysts. Sometimes a cyst of the ovary develops between the two layers of the broad ligament, and we then have an intra-ligamentous ovarian tumor. This tumor is very difficult to remove, because it has no pedicle and has to be enucleated. The cysts of the broad ligament are several. There may be a cyst of the hydatid of Morgagni. I have no doubt that many of you have, in your examinations, found a little body, as large as a pea, filled with a gelatinoid fluid, at the fimbriated extremity of the Fallopian tube, or more correctly, of the ovi-duct. This is the remains of a fœtal structure, and is so common that it has been given the name of the hydatid of Morgagni. We have a second variety of cyst due to enlargement of the tubules of the parovarium. We may have a third variety, what might be called the free lancers of the broad ligament, due to the formation of cyst in the meshes of the connective tissue, not dependent upon any single organ, but occurring here and there in the tissue uniting the two layers of the broad ligament.

We have found, then, in this case, a fluctuating tumor, a lack of mobility and great pain. On percussion, I find resonance all around the tumor. Over the cyst there is some resonance transmitted through the tumor. I shall now examine per vaginam. Her menses stopped in December, 1877—four and a half years ago. The womb is fixed. I lay this down as a good rule for your guidance: when you find a small tumor in the abdominal cavity, connected to the womb by the broad ligament and the womb immovable, the first thing that you should think of is malignant disease. I can, by using considerable force, communicate a sort of movement to the womb, but it gives her pain. The cervix is larger than it should be in a woman fifty-three years old. Although the womb is immovable, I do not feel that mass of exudation posteriorly that I should find if the fixation were due to cellulitis; besides that, it is rare to have cellulitis in a woman so old. Passing the sound, I find that the womb runs to the right. I shall now have her removed.

Whenever you find a womb bound down like this one, with a cyst above it, with close attachments, in a woman fifty-three years old, it is well to consider the disease malignant. I do not feel at all disposed to plunge an aspirator into this cyst. I shall give her anodynes, if it is necessary, and wait developments. As I say, my opinion is that this is malignant disease of some of the annexes of the womb. It may be of the broad ligament, or it may be in the adjacent tissues, or it may be in the womb itself, but I do not think so. I consider an exploratory incision would be unwarrantable under the circumstances.

Editorial Department.

Periscope.

Rupture of Uterus During Eighth Month of Gestation.

In the St. Louis *Medical and Surgical Journal*, Dr. Walter B. Dorsett records the following case:—

Mrs. A. C. B., colored; aged forty years; nativity, Virginia; occupation, washerwoman. First menstruated at the age of thirteen years, and continued to menstruate regularly all her life, except during her pregnancies. Had given birth to nine healthy children, all of whom were born at full term, and three years apart.

She was a well developed, muscular woman, and had always enjoyed good health. Menses stopped nine months prior to my visit, and she suffered no inconvenience from the condition except from violent movements of the child. She knew she "was in the family way, because she felt just like she did when she was carrying her other children." One evening, about six weeks ago, on coming home very tired, from a hard day's work, sat down to rest, and on jumping very suddenly to catch a little child who was running toward an open fire, she felt a violent pain in her abdomen. She said "it felt like the child stretching out." This was followed by a "giving way" sensation, "then as if a bird was fluttering in her abdomen." Feeling very faint and weak, she immediately went to bed and sent for a physician. The physician soon arrived, and upon examination, found that she was bleeding, and "told her she was in the 'family way,' and that the afterbirth was in front of the child" (he no doubt thought it was a case of placenta prævia threatened with miscarriage); he ordered some medicine to quiet her, then left and did not return.

She said she never felt the child move after this. Her abdomen began to enlarge gradually from this time until I paid my first visit. Though she felt very weak she frequently went about the room. During this time she was always annoyed by a slight vaginal discharge, which was very offensive.

Upon examination per vaginam, the external os could be easily felt; it was soft and patulous, and the neck seemed nearly obliterated. There was a slight moisture in the vagina, due to the presence of bloody mucus, which had a very offensive smell.

The uterus was quite movable and was not adherent to the surrounding tissues. There was a general enlargement of the abdomen, and upon percussion, a very marked dullness, extending from the left iliac region, in an oblique direction, to within two inches of the lower border of the liver, having a general width of about two and one-half inches, could be easily detected. A hard tumor, about four inches in diameter, could be detected in the left iliac region. All other regions of the abdomen were quite tympanitic and very tender to the touch.

The sounds of a fœtal heart, although carefully searched for, could not be heard. She was quite feeble and weak, and the pulse was very slow and easily compressed; heart-sounds somewhat muffled. As she was suffering a great deal of pain, I ordered the solution of morphia continued. I called regularly every day, but could discover no new symptoms, and she grew gradually weak till April 5th, when she died.

April 5th, a few hours after death, I made a post-mortem. The cavity of the abdomen was opened by a succession of careful incisions carried from the lower end of the sternum to the symphysis pubis.

The child's head was found resting upon the intestines, immediately below the stomach, the right arm drawn in a flexed position, with the elbow resting on the anterior surface of the womb; the head, neck and right arm being entirely outside of the cavity of the uterus. A rent in the fundus of the uterus still grasped the child around the left side of the neck and under the right arm. The smell of the escaping gas was so offensive that it was with difficulty that we could proceed. The child, as well as the uterus, was in such a decomposed condition that we could not remove them intact from the abdominal cavity. When the child was lifted up, the right foot was seen protruding through the internal os and engaged in the neck.

This was certainly a most interesting case, and could be none other than a rupture of the uterus during the eighth month of gestation, which did not prove fatal to the mother till the time arrived when she ought to have given birth to a matured child.

The cause of the rupture was very probably due to the violent muscular movements of the child, together with a weakened condition of the uterine walls, superinduced by her jumping up suddenly to catch the little three-year old child.

The child no doubt died shortly after its partial escape into the cavity of the abdomen, or when she felt the "giving way" sensation, and the fluttering sensation was its death struggles.

It was plainly shown by our post-mortem that there had been an effort on the part of the womb to expel its contents, from the fact that the foot was found engaged in the neck, but as the head and arm had been caught in the rent by the contracting fundus, it was impossible for it to accomplish its purpose, and labor ceased. Just at this time would it not have been eminently proper if the physician could have recognized her true condition and performed Cæsarean section, and have at least tried to save the mother's life?

Physiological Activity of Super-oxidized Molecules.

Dr. Charles A. Cameron (*Lancet*) has experimented with the bromates and iodates, and has come to the conclusion that they are more active physiological agents than the corresponding iodides and bromides. The researches of Gamgee, Priestley, Larmuth and others have shown that unsaturated molecules have a higher physiological potency than saturated molecules, especially those containing the same kind of atoms. Carbon monoxide is more poisonous than carbon dioxide; the former has but two of the four bonds of its carbon atom saturated, while in carbon dioxide the four bonds of the carbon atom are saturated by the four bonds of the two oxygen atoms. The pyrophosphates and metaphosphates have unsaturated nuclei and are poisonous, while other phosphates which are saturated compounds are nearly inert, provided their bases are so. The author could not accept as established Rabuteau's theory, that the physiological activity of the elements was proportional to atomic weight.

The author considered that the high physiological activity of the bromates and iodates might be due to the super-oxidized condition of their molecules. The term super-oxidation is no doubt open to objection; but there is no better one to explain the condition of molecules containing more oxygen atoms than are necessary to saturate the bonds of the other atoms present in them. In potassium iodide we have a salt composed of two nomad elements—K—I, and therefore, according to the doctrine of atomicity, it is a saturated compound. When four atoms of oxygen are added to K—I we have six oxygen bonds in excess of the number requisite to saturate the iodine and potassium.

More than a year ago he introduced two new compounds—namely, iodate of quinine and bromate of quinine. They have been so largely prescribed in Dublin that one firm alone, Messrs. Graham & Co., have sold more than a cwt. of the iodate, in the form of a granulated effervescing compound, each drachm of which contains two grains of iodate of quinine (a dose). The iodate has been found a valuable remedy in sciatica, severe articular pain which had resisted the action of the drugs which generally afford relief in rheumatic and gouty affections, malarious enlargement of the spleen, sluggish forms of pulmonary congestion, and in secondary syphilitic disease.

Iodate of quinine is prepared by neutralizing freshly precipitated quinine hydrate, with a solution of iodic acid in eight parts of water. The temperature may be raised to 100° F. Dried at a temperature of 100°, it loses no further water by being kept in vacuo over sulphuric acid. It therefore, prepared in this way, contains no water combined. The mean of several analyses showed that it contained 22 per cent. of iodine; it is, therefore, composed of a molecule of iodic acid and one of quinine: $C_{20}H_{24}O_2N_2HIO_3$. The theoretical proportion of iodine would be 22.92 per cent.; but the salt was faintly alkaline, showing that there was a trace of free quinine. The iodate dissolves in 700 parts of water, and is freely soluble in spirit of wine, less so in ether and alcohol. Hydrochloric, acetic, and most other acids dissolve it, forming colorless solutions. If strong sulphuric acid be allowed to drop on quinine bromate, a detonation occurs, a puff of black smoke is given off, and the compound is completely decomposed. On quinine iodate the strongest sulphuric acid produces merely a change from a white to a very light yellow color; and the addition of water forms a colorless solution. At 100° Centigrade, quinine iodate undergoes slight decomposition.

A brief reference to an iodate of quinine is made by Serullas, but of bromate of quinine no account could be found in the books or journals. It may be prepared by precipitating barium bromate by sulphate of quinine, and evaporating the solution separated from the barium sulphate, also by neutralizing bromic acid solution with quinine. It occurs in milky, minute needles, very soluble in water, spirit of wine, and dilute acids, except nitric acid. It is fully as active in its physiological effects as the iodate. It may be prescribed as a mixture, in pills, or in the granular effervescing mixture of the Pharmacopœia. It is soluble in 250 parts of water. Soon after the administration of the iodate of quinine, iodic and hydriodic acids appear in the urine. The quinine also appears, but arrives somewhat later.

The Iodoform Dressing in Vienna.

Dr. Roswell Park writes a very interesting communication on this subject to the *Annals of Anatomy and Surgery*. He says that Vienna was the scene of the first trials of iodoform, and Moosetig-Moorhof makes the statement that he has now treated about 7000 cases with the drug since he began to use it. These were cases of all grades of severity. In all this large number he had seen no case which exhibited any of the characteristic signs of the so-called iodoform intoxication. But Dr. Park adds that since this report, it is currently rumored that he nearly lost one case from this cause. His method of using it is based on a principle, and differs from that employed by most men who use it freely. He holds that since carbolic acid is eliminated by the kidneys, the elimination of iodoform by the same emunctories is prevented, if the carbolized spray or irrigations of carbolized water are used during, or even before the operation. He, therefore, uses nothing but clean water during the operation, and then applies iodoform, with full confidence that whatever amount may be absorbed can be readily removed by the kidneys. In the general hospital, Billroth, Albert, Dittel and Weinlecher have all settled down into about the same routine in using it. The part to be op-

erated upon is scrubbed with soap and carbolized water, and then carefully carbolized again. The operation is then performed. All the instruments and sponges are laid in carbolized water, and before dressing the wound is thoroughly irrigated with a 3 per cent. solution. It is then dressed with iodoform gauze. If advisable, the wound may be dusted with iodoform powder; in sub-periosteal amputations, it is dusted in many cases under the periosteum; in osteo plastic resections, between the ends of the bones, and after extirpation of tumors, many would sprinkle it upon the inner surface of the flaps. Under the influence of iodoform, there is much less suppuration, and whatever discharge takes place is more of the nature of a serous exudate.

An absolute indication for change of dressing is an elevation of temperature after it has been for several hours or days normal. Relative indications for the same are pain, and burning and itching in the part.

Iodoform ranks ahead of carbolic acid as an antiseptic, and it, undoubtedly, promotes absorption more rapidly than any other medicinal agent. For this reason it is largely used by syphilologists and dermatologists in Vienna, for hastening the subsidence of buboes and o' scrofulous adenoid enlargements. They inject it in ethereal solutions. There is much room for doubting the anti tuberculous properties which its introducer claimed for it. It undoubtedly promotes healthy granulation, but that it can change a tuberculous into a healthy process in any other way is hardly credible. Some systems are very tolerant of this drug. Gussenbauer, of Prague, after resecting an ankle, stuffed over eight ounces of iodoform into the wound without any bad result.

Whether iodoform thus filled into an open wound is any better than boracic acid is an open question. But there can be no doubt but that iodoform should become in America, as it is here, *the* antiseptic of the present and immediate future, for general use, until something better offers. As at present used here, in small quantities, it has caused no real trouble. Bearing in mind that no case has been reported of serious trouble following the use of not more than one hundred and fifty grains at one time, we may proceed, intelligently and fearlessly, though withal watchfully, to the most thorough and radical operations, confident that by the judicious use of this agent in our dressings we can accomplish all that surgical art can achieve, and at much less expense of money, time and labor, or pains; and even do all this better than it was done three years ago by the sole aid of carbolic acid. Surely the time is past when an American surgeon can be condemned for not using the spray.

Pemphigus Vulgaris.

June 21st of this year the Berlin Medical Society had a very interesting meeting, a report of which we find in the *Deutsche Med. Zeitung*, of June 29th. Dr. Schœler presented a case of pemphigus vulgaris.

The patient, a girl, eight years old, well developed, and having enjoyed up to that time very good health, was taken sick in August of last year. She complained of not feeling well, and had mild fever. Around the mouth and the lips slight swelling and redness appeared. A few days later vesicles of the size of a pea, and filled to tension with a clear, watery fluid, became visible. The same redness and swelling made their appearance on the elbows, the knees and ankles, and spread from there over the extremities and the trunk. The face was not excepted, neither were the eyelids. Whenever the vesicles had existed a few hours or a day, they either dried up and formed scabs or they burst, and the watery fluid oozed out. During the further progress of the disease this fluid assumed a dirty appearance, and some of the vesicles were, from the beginning, filled with a bloody serum. After a few weeks, and when the fever had ceased, the vesicles became continuously larger; at last they were of the size of a hen's egg, and appeared in such rapid succession that the whole back looked like a raw surface. After the discharge of their contents, or after the falling off of the scabs, the vesicles left no cicatrices, but red spots persisted for a long time, and on the sites of the vesicles filled with bloody serum pigmentary changes took place. Not only the skin, but the scalp and the mucous membranes also became gradually the seat of this eruption. Vesicles, or rather bullæ, formed in the mouth, in the rectum and in the vagina. Micturition and defecation were painful. But the general health of the child did not seem to suffer; nay, notwithstanding the little patient had to be confined to her bed from August to January of this year, she increased her weight by four pounds; which is the more remarkable as the child suffered from three to six times daily from epistaxis. During January a remission took place; the bullæ again became vesicles, and these smaller and smaller, and appeared at longer intervals; and for the last eight weeks only one little vesicle of the size of a split pea makes its appearance every few days. During the long illness her hair fell out in great quantity, and she lost her nails. And what is a rare occurrence, on the place of the old bullæ in the face and over the upper part of the body an immense number of miliary papules have developed.

About a week ago the patient had to be attended for an eye affection. The vesicles on the lids had also spread further and attacked the mucous membrane of the eye. During her whole illness the girl had, on account of the secretion and of the photophobia, not been able in the mornings to open her eyelids. Only a few days ago her mother had observed on the left eye a membrane stretched over it, from the canthus internus to the middle of the organ. On ectropiosing the eyelids a prominent cicatrix is observed on the left upper mucous membrane of the lid. The rest of the mucous membrane is shrunk up, and has lost its natural gloss. The right eye exhibits a similar picture. On the cornea one notes fine circular spots. The whole process may be compared to the appearance of conjunctivæ which for years have been cauterized most energetically.

The prognosis of this *pemphigus vulgaris* is rather doubtful, but considering the youth of the

patient and the fact of the vesicles having become so much smaller, fewer and rarer, it may be more favorable than is usually the case. Medical literature has only very few such cases on record.

Regarding the treatment, the eye physician, after cutting through the anchyloblepharon, has continued the measures adopted by the attending physician, viz.: Fowler's solution internally and aq. calcis externally.

Treatment of Fungous Arthritis.

The French pathologists apply the designation fungous arthritis to that form of chronic synovitis or arthritis in which the synovial membrane becomes white and sodden and the articular cartilages more or less eroded and disorganized. At a recent meeting of the Société de Chirurgie, M. Marc Sée presented a young girl who had tuberculous or fungous arthritis of both knee joints. After considerable treatment M. Sée decided to follow the practice of certain German surgeons who recommend injections containing iodoform for the destruction of tuberculous products in inflamed joints. He injected fifteen minims of a 20 per cent. solution of iodoform in ether into the left knee, which was most affected. The next day the knee was swollen, red and painful, but after a few days of perfect repose of the joint these symptoms disappeared, and after fifteen days there was notable amelioration in the condition of the joint. A second injection was made into the joint, with gratifying results, for the lateral immobility has at present disappeared, and the patient can use the limb in walking.

In the discussion which followed M. Desprès remarked that he had made iodinized injection into joints in three cases; in one, of dry arthritis, the patient succumbing two years later to a cardiac affection, when the joint was found filled with pus, whether of recent formation or not he was unable to determine. In the two other cases excellent results were obtained.

M. Verneuil said that at a therapeutic point of view, distinction should be made between fungous masses of recent origin and those of old date. In the second place, at an anatomical point, these fungous masses may, according to M. Verneuil, be divided into three different varieties: 1st. Those which succeed to chronic rheumatic arthritis. 2d. Those which contain tuberculous follicles, constituting tuberculous synovitis. 3d. Those which are symptomatic of an adjacent bone disease. In practice, this distinction of varieties is of capital importance, for on it must be founded the course of treatment to follow.

Where the fungous masses are of tuberculous origin, cure cannot be obtained by ordinary therapeutic means; resection often proves insufficient, for there is more or less rapid relapse; in such cases it is very often found necessary to have recourse to radical measures, amputation often proving the only resource. Where, however, the fungous masses are of rheumatic origin, immobility, with iodinized injections, succeed very well. The treatment is long, and anchylosis generally the result; however, in some cases, the movements are regained.

Finally, when disease of adjacent bone is the cause, it will generally suffice to resect the diseased bone, and the fungous masses will disappear.

It has been recommended to excise and remove the entire synovial membrane, but this operation is very difficult, and what is more, unnecessary, for removal of the diseased bone generally induces disappearance of the fungous masses. So, then, according to M. Verneuil, the rules for practice in such cases would be as follows: 1st. No active intervention in fungous arthritis of rheumatic origin. 2d. Resection and, unfortunately too often, amputation, in cases of tuberculous nature.

Ringworm of the Scalp.

In the *British Medical Journal*, Dr. John Cavafy recommends the following procedure for the cure of ringworm of the scalp:—

Thinking that the accumulation of sebaceous matter and epithelial debris in all probability prevents the penetration of remedies into the follicles, which are further blocked by the swollen, diseased hairs, and that it should be our object to bring any parasiticide into contact with the most deeply seated fungus, it occurred to me that we might attain this end by the employment of a parasiticide held in solution in a fluid which should also dissolve fatty matters. It certainly seemed to me desirable to exclude fatty and oleaginous materials from the remedy, and to apply this in solution, *i. e.*, the minutest form of subdivision. Accordingly, I determined to employ a solution of boracic acid, twenty grains in an ounce of spirit, to which a drachm of ether was added; and directed this lotion to be forcibly rubbed into the affected parts of the scalp, with a rag or moderately stiff brush, three times daily, the whole head being ordered to be washed every morning with plenty of hot water and soap.

The result of this treatment in severe chronic uninflamed cases is certainly excellent, when it is faithfully carried out. The frosted, scaly aspect of the diseased patches is soon replaced by healthy-looking scalp; the broken and twisted hairs appear to be removed, and a healthy growth makes its appearance. When the scalp is seen shortly after the application of the remedy, it is found to be shining, owing to the presence of a fine glaze. This, I presume, consists of dissolved sebaceous matter mixed with boracic acid, deposited in a thin film after evaporation of the solvent; and for this reason I think its removal by soap and water is a necessary adjunct to the treatment. This would, perhaps, be best effected by alkaline spirit of soft soap, which, however, I have not used.

Now, will this treatment suffice to cure chronic uninflamed ringworm? I should hesitate to say. I have certainly seen many cases in which the disease appears to have been entirely removed; but (there is always a "but" in the treatment of ringworm) I must admit the possibility of a diseased stump or two having remained. I find it an extremely difficult matter to be quite certain that every hair is healthy on a scalp which has

once been affected with ringworm, and in this I believe my experience is not singular. I have had cases which seemed cured brought back to me on a future occasion with distinct ringworm; and it is, no doubt, possible that this may have started from an old, undetected, excessively minute focus. But, with our very imperfect means of observation of hospital out patients, it seems equally possible that such cases may be due to reinfection, either from other children in the same family or from a new source.

I may say, in conclusion, that Professor Kaposi (*Hautkrankheiten*, ed. i, p. 740) recommends, among other remedies, the application of alcoholic and ethereal solutions of carbolic and salicylic acids. These would, no doubt, do very well; but the entire absence of any irritation by the use of boracic acid seems to me in its favor, while its efficacy as a parasiticide is unquestionable. The remedy may be, no doubt, varied in different cases; but, if our object is that it should penetrate into the hair follicles, I certainly think that it should be employed in solution, and forcibly rubbed in, and that the use of an oily or fatty vehicle is to be deprecated.

Static Electricity as a Therapeutic Agent.

At a recent meeting of the New York Academy of Medicine (*Boston Med. and Surg. Jour.*) Dr. J. Knight read a paper on this subject. The author stated that he had had a personal experience with static electricity, of fifty years. He related a case of wrist-drop which he had cured in two weeks by its application from the shoulder to the phalanges. Very frequently, on account of unfavorable atmospheric conditions, he had been compelled to resort to dynamic electricity as a substitute. But he has now obtained an instrument (Holt's induction machine) by which statical electricity can be generated in any quantity at almost any season of the year. Statical electricity differs in its effects from dynamic, and is more widely applicable as a therapeutic agent. It is not only an excitant but a sedative as well, while dynamic electricity acts merely as an excitant. He believes that static electricity coöperates with vitality, and this is always to be regarded as the central idea in connection with electricity. In the second place, it has great reactive power. This is so intense that the nervous system will respond to electricity when all other stimulants have failed to excite it. It is likewise an alterant, changing the action of an organ by improving its general tone, and it promotes nutrition. As a general rule it is better to have the current feeble rather than strong, and it is advisable to repeat it at frequent intervals, applying it at each sitting for a considerable time continuously. Golding Bird stated in 1846 that static electricity ought not to be used in confirmed organic trouble, as in such cases it was likely to bring on fatal apoplexy. Dr. Knight does not hesitate to use it in such cases in his own practice, but he believes that venesection, in addition, is essential, to avoid the dangers referred to. He has found it especially useful in various forms of paralysis of the hand and forearm, and in not a single case of this kind has it failed to afford relief. In rheumatic paralysis or wasting of muscles he has found it very useful, and in only two out of ten such cases has it failed in his hands. He places the patient on an insulated stool and applies the electricity from the upper cervical vertebræ to the extremities, drawit off by means of metallic points. In conclusion, he gives a warning as to the abuse of the agent, and says that he has seen patients who have been irrecoverably injured by this as well as by dynamic electricity. If a tendency to apoplexy is noticed during its employment, hydragogue cathartics will generally suffice to remove it; but, as already mentioned, it will be necessary in some cases to resort to venesection. Dr. Dana had obtained excellent results in two cases of constipation, where galvanism and other agents had failed. Dr. William Morton is of opinion that the electricity should be used in large quantity, and should be applied, as far as possible, directly to the spot affected, as he does not believe it to have any general effect upon the system at large. He considers it to be almost a specific in hysteria. Many cases of spinal anæmia, with emotional disturbances, hemi-anæsthesia and other similar manifestations, will yield beautifully to free applications of static electricity to the spine. Dr. Rockwell considers static electricity very valuable, but does not believe it to possess more merit than some of the other forms. In a number of instances he has noticed that after a time the improvement which had at first taken place under the use of various forms of electricity ceased, and in these cases the static form can be resorted to with very good results.

An Apparatus for the Administration of Ether.

Dr. J. C. Hutchinson recently presented to the Medical Society of the County of Kings (*Proceedings of the Society*) an ether inhaler, which he describes as follows:—

A tin tube for holding a sponge for the ether, three and a quarter inches long and two and a quarter inches in diameter; one end is left open, to be covered by a muslin bag, the other is closed, with the exception of an opening at its upper part, one inch in diameter, into which is inverted a tube for attaching a rubber hood. This tube projects backward three-fourths of an inch, and is then carried downward, at a right angle, to a level with the lower margin of the sponge tube. This arrangement prevents the liquid ether from running down upon the patient's face or mouth. There is an opening in the centre of the top of the large tube, one inch in diameter, having a neck half an inch long, which is closed by a cork; through this opening the ether is poured upon the sponge without removing the mask from the patient's face. A rubber hood, such as is used in giving nitrous oxide gas, fits accurately over the mouth and nose, and may be so adapted to any face as to completely exclude the air. The neck of a muslin bag, pear-shaped, eleven inches long, and eight or nine inches wide at its widest part, fits closely over the open end of the sponge tube, and has a slit an inch and a half long at its mouth, to the corners of which tapes are attached, for the purpose of tying it tightly around the

opening through which the ether is poured, so as to prevent the entrance of air at this place. The bag should be made of close material, and when it is wet with water, it is impervious, or nearly so, to air or ether vapor.

Mode of Using the Inhaler.—When about to be used, the large tube is filled with a piece of coarse sponge, of proper size and shape, which has been previously wet with water and thoroughly squeezed. The bag is then wet and squeezed, so that it does not drip, and secured over the mouth of the tube. The sponge will hold two ounces of ether, which should be poured upon it through the opening on the top of the tube containing the sponge. In most operations the first charge of ether is all that is required, and in many, half the quantity mentioned is quite sufficient. The rubber hood is applied accurately over the mouth and nose, but the opening through which the anæsthetic is poured is left uncorked until tolerance or partial anæsthesia of the mucous membrane of the air passages is established, as indicated by deep inspirations. Free dilution of the ether vapor with atmospheric air when its administration is first begun, prevents, in a measure, the coughing and strangling that is liable to occur from the sudden application of the concentrated vapor.

The bag ordinarily lies upon the upper part of the chest, but in operations about the neck and upper part of the body, it may be placed to one side or the other, or upward over the face, by turning the sponge-holder on the rubber hood, the latter retaining its position.

The Advantages of the Inhaler.—The advantages which the writer believes this apparatus possesses are :—

1st. The mechanical act of respiration is entirely free—"the lower end of the bag rises and falls with the respiration, without offering any practical obstruction to the mechanical process" (Squibb), and the breathing can be closely watched.

2d. No part of the instrument is liable to become soiled by expectorated or vomited matters, except the rubber hood, and this is easily cleaned —an advantage of no small importance for the antiseptic days. But it is better to throw the whole apparatus into a basin of water after each inhalation, to free the products of respiration. *No inhaler* should be used a second time without being thoroughly cleansed.

3d. The apparatus economizes ether, the first charge (two ounces) being usually sufficient for a long operation ; it prevents, in a great measure, the vapor from permeating the apartment, and affecting the comfort of the operator and his assistants, and especially the anæsthetizer, who often suffers from inhaling a large quantity of the vapor himself.

4th. It is simple in its construction, having no valves, and is inexpensive and portable.

The apparatus, together with a bottle or tin can containing four or six ounces of ether, may be carried in a tin case 9 inches long and $3\frac{1}{2}$ inches in diameter, divided by a diaphragm in the middle—one side of the case for the ether bottle and rubber hood, and the other for the tin tube (the sponge being placed inside of it) and the bag.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a reprint from the *Alienist and Neurologist*, Dr. C. H. Hughes, of St. Louis, gives an interesting note on the essential psychic signs of general functional neuratrophia.

——Dr. Thad. M. Stevens, of Indianapolis, has cogently shown, in a recent reprint, the need of hospitals in Indiana, constructed and controlled by State authority.

——The class work of the pupils of the Illinois Asylum for feeble minded children is given in a brief pamphlet, and presents a gratifying exhibit of improved intelligence.

——Catarrhal affections are so common that Dr. William Pepper's address upon them (reprint from the Trans. of the Am. Med. Assoc.) cannot but be welcome to very many readers.

——An interesting sketch of recent advances in the Specialty of Ophthalmology is presented in a recent reprint by Dr. Julian J. Chisholm, of Baltimore. He considers one of the most important questions of the day in this branch is, How to prevent children from becoming near-sighted.

——In a pamphlet of 134 pages, entitled "Contributions to Practical Gynecology," Dr. S. James Donaldson discusses the treatment of uterine deflexions and dysmenorrhœa. He differs widely from Dr. Sims and his school, in the theory and therapeutics of dysmenorrhœa, and contends that much harm has been done by their teaching. A number of valuable suggestions will be found in the work. (For sale by J. H. Vail & Co., 21 Astor Place, N. Y.)

——The statistics of insanity have a valuable addition in the Fourteenth Report of the Inebriates' Home, Fort Hamilton, N. Y., by Dr. Lewis D. Mason. It presents a careful analysis of 600 cases of alcoholic inebriety. One warning it conveys deserves to be prominently emphasized : "The principal hereditary cause of inebriety is an inebriate father or mother ; these records show an inebriate father in 209 of the above 600 cases." The address of the President, Dr. Theodore L. Mason, is in support of the opinion that inebriety is a disease.

——Another severe criticism of the surgical treatment of the late President Garfield comes from the pen of Dr. R. H. Day, of Baton Rouge,

La. (reprint from New Orleans *Medical and Surgical Journal*). The result of his study of the case—and it is a candid and intelligent study—may be given in his own words:—

"I cannot avoid the conclusion that, if the right line of surgical procedure had been adopted at the start, such as I have indicated, and such as is taught and practiced by the most eminent surgeons in every country, those very serious complications which took place during the progress of the case, such as large pus-sacs and long pus channels, might not have occurred; and hence no septicæmia to poison the blood, break down the vital forces, and arrest those efforts at reparation which nature had most evidently commenced. Then, as a logical and pathological fact, the death of the President was not an *inevitable* but an *incidental* result of his wound."

——In order to determine the propriety of bronchotomy in cases of foreign bodies in the air passages, Dr. J. R. Weist, of Richmond, Ind., has made an analysis of 1000 cases (reprint from the *American Practitioner*). His conclusions are as follows:—

1. When a foreign body is lodged either in the larynx, trachea or bronchia, the use of emetics, errhines or similar means should not be employed, as they increase the sufferings of the patient and do not increase his chances of recovery.
2. Inversion of the body and succussion are dangerous, and should not be practiced unless the windpipe has been previously opened.
3. The presence simply of a foreign body in the larynx, trachea or bronchia does not make bronchotomy necessary.
4. While a foreign body causes no dangerous symptoms bronchotomy should not be performed.
5. While a foreign body remains fixed in the trachea or bronchia, as a general rule, bronchotomy should not be practiced.
6. When symptoms of suffocation are present, or occur at frequent intervals, bronchotomy should be resorted to without delay.
7. When the foreign body is lodged in the larynx, there being no paroxysms of strangulation, but an increasing difficulty of respiration from œdema or inflammation, bronchotomy is demanded.
8. When the foreign body is movable in the trachea, and excites frequent attacks of strangulation, bronchotomy should be performed.

BOOK NOTICES.

Two Hard Cases; Sketches from a Physician's Portfolio. By W. W. Godding, M.D. Boston: Houghton Mifflin & Co. 1882. 1 vol., cloth. 12 mo. pp. 257. Price $1.00.

The two hard cases are a young man who committed suicide in the Taunton, Mass., asylum, and Guiteau. As 224 out of the 257 pages are devoted to the latter, the insertion of the other "hard case" is apparently only thrown in to make weight. Nor has it much similarity with that of Guiteau. The writer believes the famous assassin was a lunatic, and criticises at great length the testimony of the experts for the government.

A Rational Materialistic Definition of Insanity and Imbecility, with the Medical Jurisprudence of Legal Criminality founded upon Physiological, Psychological and Clinical Observations. By Henry Howard, M.R.C.S. Montreal: Dawson Bros. 1882. pp. 145.

Dr. Howard argues, from first to last, that animal mind is a product of organic matter; that, therefore, insanity is a physical disease; that there is no such thing as "functional insanity." Much of his argument is illustrated from some well known recent cases, in which he was called as expert witness. He enters to some extent into the best plans of managing convicts, and his suggestions certainly merit attentive consideration. He is also justly severe in his criticism of the common method of employing untrained and often ignorant men to decide on grave criminal charges. In fact, there are a great many thoughts in the volume that cannot but impress the reader.

The Change of Life in Health and Disease. By Edward John Tilt, M.D. Philadelphia: P. Blakiston, Son & Co. 1882. 8vo. pp. 184.

The day of cheap medical books seems to have dawned upon us. This is one of Messrs. Blakiston, Son & Co.'s "New Octavo Series of Standard Medical Books," sold in paper at 75 cts., cloth $1.25 each. Each book is sold separately, so that the purchaser of one good book, that he wants, is not obliged to carry a cartload of dead wood in the shape of uninteresting or third-rate volumes of the series, as is the case with some other series of "Standard Medical Works."

Of course, most books in all such series, where the main point is cheapness, are old, and reprints from English publications, more or less trimmed down. It is safe to say, however, that the reader will surely get his 75 cents' worth if he reads any one of the volumes with care and judgment.

Dr. Tilt, for instance, the author of the volume before us, is a peculiarly pleasant writer and a sagacious gynecologist. His subject is a comparatively unhackneyed one, and his suggestions are sensible and shrewd. What he writes both pleases and instructs.

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HEALTH OF THE TROPICS.

What we lately said about the effects of high summer temperature on the health may further be illustrated geographically by the tropics. It is a prevailing opinion that these are generally unhealthy. Such is not the case, or, when it is so, the causes of the excessive mortality are patent and preventable.

It is not fair to take, for example, the mortality of Madras, which in some weeks runs up to one hundred per thousand per year, and point to it as a result of temperature. In fact, it is the result of starvation, neglect and recklessness.

The highest average temperature in the world is found near the southern extremity of the Red Sea. Yet the medical officers of the English Abyssinian expedition report that the natives of that region are vigorous and long-lived. The virility of the old men was particularly noticeable. It was not at all uncommon for them, when over seventy, to have numerous children. As their wives were strictly secluded, the paternity was indisputable.

Much has been said lately about the unhealthiness of Panama, and the mortality attending the great work of M. DE LESSEPS there in progress. But these accounts have been vastly exaggerated. We are acquainted with gentlemen who have spent years in Panama, and they consider the climate quite salubrious to those who become acclimated.

Within the last week we have spoken with a distinguished scientist who has just returned from a scientific mission to Darien and Panama, and he pronounces the reports about the excessive sickness among the canal employees to be false. Most of the workmen are from the neighboring parts of the tropics, and bear the climate well.

As to the asserted inability of natives of the tropics to bear severe labor, it is completely refuted by the history of civilization. The greatest works of man on both continents have been in tropical or sub-tropical climes. Civilization had its birth in Mesopotamia and Egypt, where the climate is extremely hot, and again in Yucatan and Peru, the one directly under the equator, the other enjoying a warmth which varies from 70° to 110° in the shade.

It is true that a race long accustomed to the bracing air of a northern winter loses somewhat when it is translated to a land of perpetual summer. Much of this, however, is owing to carrying the habits of the cool into the warm latitudes. When such emigrants adopt the clothing, food, and habits of the land to which they go, they suffer much less.

Two potent reasons why modern races have less energy under great heats, are unquestionably, alcohol and tobacco. Both of these profoundly impair the nerve force, and tend to diminish the resistance of the body to extremes of temperature. One able observer attributes the deterioration of the European natives of the tropics principally to the use of tobacco, and his suggestion has much to support it. It is only since these two agents, and especially tobacco, have been widely used, that the vigor of tropical nations has markedly diminished.

TRUE DISINFECTANTS.

Many a so-called disinfectant is employed to-day in a certain solution, when it does not possess any value whatever, under the circumstances. If it is really our intention to disinfect wounds, we must be certain, at least, that we will achieve our object with the remedy we use; if such is not the case, we only irritate without doing good.

The Imperial Board of Health in Berlin has published a number of experiments which have been made by Dr. R. KOCH, with the view of establishing the real value of many so-called disinfectants. It would lead us too far to give the whole procedure employed to ascertain the facts mentioned, and we will, therefore, confine ourselves to giving the more important results of the investigations of this celebrated physician.

Most surgeons have been satisfied to wash their hands and to clean their instruments with a two per cent. solution of carbolic acid. Such a solution is almost inert, and a five per cent. solution is necessary to achieve the desired object.

But what is the most interesting is the fact that *carbolic acid dissolved in oil or water proved itself totally inert!* What do our surgeons who still make use of so-called carbolized oil say to that? KOCH found that carbolic acid, when dissolved in oil or in alcohol, had not the slightest influence on the vitality of any of the micrococci or bacilli.

Concerning sulphurous acid, it was found to be powerless against spores; bacilli and micrococci, when exposed to the fumes in a box, were killed within twenty minutes, but were very little influenced, or not all, when exposed to the fumes in a room at the usual temperature.

Chloride of zinc showed itself just as harmless. A five per cent. solution exerted absolutely no influence on the spores of anthrax, notwithstanding the same had been exposed to the action of the remedy for a period of thirty days.

Of other drugs, the spores of the bacilli were killed by chlorine water, fresh prepared; two per cent. bromine water, one per cent. aqueous solution of corrosive sublimate, five per cent. solution of permanganate of potassium, one per cent. osmic acid, within one day; formic acid, four days; ol. terebinth, five days; solution of chloride of iron, four days; one per cent. arsenious acid, one per cent. quinine (water with muriatic acid), two per cent. muriatic acid, within ten days; ether within thirty days.

Inert or possessing very little influence: distilled water, alcohol, glycerin, oil, sulphur-carbon, chloroform, benzol, petroleum-ether, ammonia, concentrated solution of common salt, bromide and iodide of potassium, 1 per cent. sulphuric acid, sulphate of zinc and copper, alum, 1 per cent. permang. of potash, chromic acid, the chromates and bichromates, chlorate of potash 5 per cent.; boracic acid 5 per cent.; acetic acid 5 per cent.; tannic acid 5 per cent.; benzoate of sodium 5 per cent.; quinine (2 per cent. in water 40, alcohol 60), iodine (1 per cent. in alcohol), thymol (5 per cent. in alcohol), salicylic acid (5 per cent. in alcohol, 2 per cent. in oil).

As regards remedies which prevent the further development of spores, the following results were obtained. The first number means retarding the development, the rest totally preventing it:

Corrosive sublimate,	1 : 1,600,000	1 : 320,000
Oil of sinapis,	1 : 330,000	1 : 33,000
Arsenite of potash,	1 : 100,000	1 : 10,000
Thymol,	1 : 80,000	
Ol. terebinth,	1 : 75,000	
Hydrocyanic acid,	1 : 40,000	1 : 8,000
Oil of peppermint,	1 : 33,000	
Chromic acid,	1 : 10,000	1 : 5,000
Picric acid,	1 : 10,000	1 : 5,000
Iodine,	1 : 5,000	
Salicylic acid,	1 : 3,300	1 : 1,500
Permang. of pot.,	1 : 3,000	
Muriatic acid,	1 : 2,500	1 : 1,700
Camphor,	1 . 2,500	
Eucalyptol,	1 : 2,500	
Benzoic acid,	1 : 2,000	
Borax,	1 : 2,000	1 : 700
Carbolic acid,	1 : 1,250	1 : 300

But as, for purposes of disinfection, the micro-organisms must be killed, and in the shortest possible period, and the effect of retarding the development of the spores (antiseptic) is not sufficient, only the following remedies can, according to KOCH'S experiments, be said to be of value: corrosive sublimate, chlorine, bromine, iodine. Bromine in form of vapor is, as concerns rapidity of action, superior to chlorine and iodine.

Notes and Comments.

Sulphuretted Hydrogen as a Remedy for Tuberculosis.

Dr. Froschauer has published a number of successful experiments which he made with sulphuretted hydrogen on animals, as a remedy against septicæmia. In connection with this, Prof. Arnaldo Cantani (Neapol.) has written to the *Centralb. f. Med. Wissensch.*, No. 16, 1882, and mentioned that among other experiments he made with disinfectants, to find out their value as curative remedies in tuberculosis, he has instituted also a number of observations with sulphuretted hydrogen. This is given to the patients internally, in the form of water impregnated with the gas. Besides, the patients are kept for a long time in a room the air of which is loaded with the gas, which the patients inhale. The first few days the latter object somewhat to this method, the odor evidently not being very agreeable to them, but in a short time they become accustomed to it, and as they feel the decided benefit they gain by this procedure, willingly continue it.

These observations are not concluded as yet, but Cantani is satisfied that, so far, the following results have been achieved :—

The fever disappears within a few days, and does not return as long as the inhalations are continued. The same is the case with the chilly sensation and the night-sweats, which usually cease. The local morbid process does not make any further progress, and is undoubtedly arrested for the time being. The expectoration diminishes decidedly in quantity.

Cantani intends to continue these experiments, and will not fail to report any further results.

Skin Eruptions in Locomotor Ataxia.

Charcot, Velpian and others have observed the presence of skin eruptions (papulæ, maculæ, etc)., in cases of sclerosis of the posterior columns. These eruptions have been found to be in intimate connection with the lancinating pains of tabes. J. Strauss ("Des ecchymoses tabé tiques, à la suite des crises de douleurs fulgurantes;" *Arch. de Neurologie, etc.*, 1881, No. IV), has now noted ecchymoses in the skin appearing in tabes after the paroxysmal pains. From a description in the *Centralbl. f. d. Medic. Wissensch.*, 1882, No. 16, we take the following :—

These ecchymoses show themselves only after the attacks are over, and they resemble the spots which result when the skin is pinched severely; they have an irregular, round shape, and their size varies from that of a split pea to that of a silver half dollar. There are, usually, several (3–4) spots in one extremity. They are painless, and are observed only after a very severe attack of pain, and according to the nature of the latter the spots are one- or double-sided. The spots are mostly to be found above the seat of the pain, and differ from Charcot's skin eruptions by not following the course of the nerve. Exceptionally, they appear on the extremity which is not the seat of the pain. Strauss considers these spots as rather frequent in locomotor ataxia, and brings them in direct connection with the morbid alteration of the posterior columns of the spinal cord. He thinks that they are reflex phenomena (irritation of the vasodilators). This seems possible, if we remember the hemorrhages which have often been observed in cases of tabes after gastric and rectal crises (paroxysms of intense pains beginning either in the stomach or in the rectum).

Artificial Alimentation in Nervous Vomiting.

M. Gilbert Ballet, in a recent number of *Le Progrès Medical* (June 17th), gives the full observation of two cases occurring in M. Charcot's service at the Salpètrière. Both patients were hysterical, one very much so ; there was almost complete intolerance of the stomach, every species of food and drink being vomited. Both patients, on entering the service, were placed on an exclusive milk diet, but without beneficial result, as the milk was constantly and very rapidly ejected from the stomach. Then a simple tube of soft rubber (tube de Faucher) was passed into the stomach, and one quart of milk injected ; it was retained but a short time. The next day but a pint at one time was injected, and retained, and from that time milk was thus constantly introduced into the stomach and retained. This species of alimentation was continued for about fifteen days, about two or three quarts of milk being introduced daily, with four eggs beaten up and a spoonful of beef essence. After these fifteen days the first patient had gained eight pounds in weight and was able to eat without the tube. The results were equally good in the other case.

This method of artificial or forced alimentation, which is at present attracting considerable attention in the French capital, was first principally experimented by M. Debove, in phthisical patients who had fallen almost into a state of marasmus and were unable to retain any species

of food on the stomach. In such cases it gave unhoped-for results, and though it is not so constantly beneficial in incoercible nervous vomiting, it has in many cases given excellent results.

Anosmia.

In the *Lancet*, Dr. E. H. Jacob says that the total loss of smell is so uncommon, and its recov ery so very rare, that the notes of the following case possess interest. A woman, aged forty-five years, fell from a stool, striking the back of her head. Ever since (some years) she has been absolutely without the sense of smell. She did not complain of pain, but was nervous, weak and excitable. Iodide of potassium, fifteen grains three times daily, was ordered. In a week she said that her head was clearer, but the sense of smell was not improved. Subsequently a constant current, gradually increased to the highest bearable extent (about twenty cells), was passed from the mastoid process to the nasal bones, for five minutes on either side. This process was subsequently repeated four or five times, and while the sense of smell was not entirely restored, it was very much improved.

Sulphurous Acid in Typhoid Fever.

Dr. J. Burney Yeo says, in the *Practitioner*, that, his attention having been directed, by some medical friends, to the value of sulphurous acid in typhoid fever, he decided to give it a trial. The first two cases in which he used it progressed favorably to recovery, but they were of a very mild type. Finally a severe case presented itself. On the morning of the fourth day of the fever the sulphurous acid was commenced, in half drachm doses every four hours, and continued uninterruptedly for twenty days. The temperature ranged between between 102° and 104°, the evening temperature on the ninth day being 103.6°. On the tenth day there was a notable fall of temperature. It did not rise above 102° during the tenth, eleventh and twelfth days. On the thirteenth day there was another fall, the evening temperature being 101.2°, and for the next six days the evening temperature only reached on one occasion 101°. From the ninth to the nineteenth he seemed to be doing well. On the latter day he complained of abdominal tenderness. On the twentieth day the temperature began to rise again, and continued to rise gradually till the evening of the twenty-second day, when it was 103.8°. It kept at this point, but with wider oscillations than before, until the twenty-eighth day, when it reached 104.2°, the highest recorded. He died suddenly on the evening of the twenty-ninth day, with symptoms of perforation. The author concludes from this case that sulphurous acid seems to be a remedy of some value as an antipyretic in cases of typhoid, and considers it worthy of note that in this case, notwithstanding the extent and gravity of the intestinal ulcerations discovered post-mortem, the temperature was never very high, only twice reaching 104°. This remedy must be given further trial before we decide on its merits.

Hypodermic Application of Purgatives.

After L. Lewin and Kohn had published a number of observations concerning the action of certain purgatives, if employed by the hypodermic method, A. Hiller, in Berlin, made some experiments, which he reported last month in the *Zeitschr. f. Kl. Med.*, iv, 40.

The remedy mostly recommended for this purpose is *aloin*. Hiller observed, after injecting 0.15 to 0.2 grams of the remedy, a copious and soft discharge within four to six hours. But the action depends much upon the preparation of the remedy.

Colocinthinum purum (prepared by Merck, in Darmstadt, a grayish yellow powder) produced, in the dose of five to ten mgrm., watery stools with slight bellyache. A solution is made with water, glycerine and alcohol, but the injection is very painful. Just as painful are the injections made by a similar solution of *citrullin*, dose 0.005–0.01.

The same can be said of *acidum cathartinicum* (made from senna), dose 0.2 to 0.3.

We may conclude, therefore, that these injections produce too much pain, while aloin, which does not cause this inconvenience, is very unreliable.

Ammoniated Mercurial Peptones.

M. Martineau recently read a new memoir before the Soc. Médic. des Hôpitaux, on the treatment of syphilis by the hypodermic injection of these prepared peptones. It may be said that this method of treatment is at present used in many hospitals, but has not yet received sufficient attention in private practice. M. Martineau has treated 600 patients in this way, and made 11,000 injections. He regards the method as almost perfect, without contra-indications or accidents of any description. He has observed neither phlegmon, abscess, or eschar, even among diabetic patients. Salivation and mercurial

stomatitis or gastric and intestinal troubles are infrequent.

This method has a more efficacious action, and is more rapid and energetic than other forms of treatment. Under its influence the bodily weight increases and the number of globules multiply. Finally, considering the rapid beneficial effects of the treatment, its value at a financial point of view should recommend its introduction into civil and military hospitals.

According to M. Martineau, it invariably diminishes the sojourn of the patient in the hospital, and as from 3000 to 4000 soldiers are constantly under treatment for these disorders in the military hospitals, the saving in time and money would be very great.

Dried Blood.

In the *Société de Biologie* (June 3, 1882), Regnard reported the result of his experiments, by which he intends to demonstrate the value of boiled and dried blood as an aliment. He had selected sheep for this purpose. Of six sheep he gave to three this powdered blood in addition to a certain quantity of their usual vegetable food, and to the other three the latter alone. The last three died; the first developed themselves splendidly. Should this good success continue the result will be of importance, as the immense quantity of blood, which in slaughtering establishments is now only a product of waste, will become useful, and a valuable article of commerce, providing a cheaper food for certain animals. Regnard obtained also favorable results in a rachitic child, eighteen months old.

It would be well for our Commissioner of Agriculture to aid experiments of such kinds. They would be of far more benefit for all than many of the fancy experiments, for which too often large amounts of money are thrown away.

A Common Mistake Concerning Chloride of Potassium.

It is well known that chlorate of potassium is a very good remedy to gargle the throat, but comparatively few physicians are aware of the fact that it is not this remedy which is so successful in mercurial stomatitis, but chloride of potassium.

Prof. Wertheim draws the attention of physicians especially to this fact (*Wiener Med. Blätter*, 15, 1882). He reminds them that the formula of the first is, $KClO_3$, but that of the second KCl. He says that the chlorate should never be used, as in concentrated solution it may even prove very harmful; while the chloride is very innocent; a specific in sore throat, and especially in mercurial sore mouth, and very analogous to common salt, which is simply a chloride of sodium, instead of potassium. In America the chlorate is commonly used; no wonder, therefore, that it is not found here as efficient as in France and Germany, where they use the chloride.

Sugar in Pleuritic Effusions.

H. Eichhorst (*Zeitschr., f. Klin. Med.*, iii, p. 537) observed, in the serous effusion of a case of pleurisy, notwithstanding the absence of sugar, that the latter formed very soon. He examined, therefore, seventeen cases of serous exudation, with particular care; in all these cases the fluid was withdrawn with the aid of a Pravaz' syringe, and immediately analyzed. Of these seventeen cases the effusion contained, in ten cases, sugar; two were free of sugar and of ferment. The presence of sugar seemed to exclude the presence of the sugar-forming substance, which was found, however, in the others. The ferment, which was detected in two cases, had the peculiarity not to be destroyed by boiling. To examine for the sugar-forming substance, the exudation was boiled, with the addition of sulphate of sodium. When cold the addition of a solution of iodine and iodide of potassium produced a blue-violet color.

Isolation in the Paris Maternite.

M. Tarnier, in a letter recently addressed to the Soc. Médic. des Hôpitaux, recalls the very extraordinary results obtained by isolation, the use of antiseptics, and all means proper to ward off contagion. In the new pavilion he has had constructed, in which each chamber can only be entered by a separate door opening outwardly, without any aperture toward the hospital except a single large pane of glass let into the wall, permitting the surveillance of the patients, he has had but six deaths in 1200 cases of labor. Within the past few years even there have been 600 cases without a single death. No statistics ever published have shown such favorable results as these of M. Tarnier.

Opening of the Chest in Hydatid Cyst of the Lung.

At a recent meeting of the Soc. Médicale des Hôpitaux (June 23) M. Bucquoy presented a remarkable case of hydatid cyst of the lung, treated and cured by incision of the chest wall.

A man of 39 years of age presented himself, with the signs of dry pleuritis on the right side;

later the general condition became bad, and all the signs of pneumothorax were found.

By aspiration, more than two quarts of pus were withdrawn from the chest, but no improvement followed; hectic fever appeared, with fetid breath, discharge of pus from the mouth, and a second aspiration gave but about three ounces of very fetid pus.

An incision in the chest wall was then made, and the hydatid cyst extracted; rapid recovery ensued, a fistulous passage into the chest remaining.

Nasal Polypi and Asthmatic Attacks.

M. Joal, in an interesting memoir published in the *Archives Générales*, calls attention to an unrecognized cause of asthmatic attacks. Trousseau and Gueneau de Mussy had already insisted on the causative relations existing between certain forms of coryza and asthma. The author of this memoir mentions eleven cases observed by himself, where the asthmatic attacks disappeared soon after the removal of nasal polypi; in several cases the attacks reappeared when the polypi had again regained their former size. The author remarked that these patients were in general subject to arthritic manifestations, and that it was only in certain exceptional cases that the nasal polypi provoked respiratory derangement. The author is of opinion that the polypi in such cases cause irritation of the nasal mucous membrane, inducing thus, by reflex action, a spasm of the muscles controlling respiration.

Micrococci of Lupus.

Dr. M. Schüller has been able to detect in the smaller papulæ of lupus micrococci. They are observed in the larger papules too, but it is difficult to find them there. They were never absent in the sebaceous glands in the region attacked by the disease. This fact would seem to explain the good results which have been gained by the local application of pure carbolic acid.

Neuralgia of the Trigeminus Cured by Amputation of the Vaginal Portion.

In the *Centralbl. f. d. Medic. Wissensch.*, 1882, No. 16, we find the following interesting case reported: Dr. J. Holst (*Petersb. Med. Wochschrift*, 1882, 1) had a patient who, after having taken a cold bath during her menstruation, was attacked by dysmenorrhœa, which was cured by a course of bathing at Kissingen. But soon a very severe right-sided neuralgia of the trigeminus (2d and 3d branch) made its appearance, which exacerbated decidedly during each menstrual period. Life became a burden to her. Holst found the vaginal portion swollen and indurated; there was endometritis colli follicularis. He amputated the neck and the neuralgia disappeared; the first menstruation after the operation was still a little painful, but the next was free from pain. All dysmenorrhœa and neuralgia have since ceased, and the patient enjoys splendid health.

Resection of the Stomach.

The *Allg. Med. Central Zeit.* reports, under April 19th, from Bamberg, that the physician-in-chief of the surgical division of the city hospital, Dr. Nebinger, performed resection of the stomach on a patient over forty years of age. The cause was cancer. The patient, who on April 4th, was able to take solid nourishment again, is doing very well, and there is every hope that he will fully recover from this dangerous operation. It is doubtful, however, if the malignant growth will not return.

Paralysis After Extraction of a Tooth.

F. H. Balkwill, D.D., of Plymouth, extracted, a short time ago, a lower molar tooth for a young man. After the extraction the patient complained of numbness of the skin over the chin. Later, this sensation changed to one of pricking needles. The anæsthesia reached from the median line of the lower lip and the chin to a little over the region of the foramen mentale. About a month later normal sensation returned.

The extracted tooth exhibited, on the lingual side of the posterior root, near the point, a transverse fossa, which had undoubtedly been made for the passage of nervus inframaxillaris. During the extraction the nerve received, evidently, a severe concussion, or was partially torn; hence the anæsthesia.

A New Mydriatic.

Hyoscin, prepared by Ladenburg (E. Emmert, *Corresp. Bl. f. Schweig. Aerzt.*, 1882, 2) and crystallizable by hydroiodic acid, has proved to possess, if dropped into the eye, a remarkably rapid mydriatic effect, and surpasses, in this respect, atropia, in a high degree. But the solution should be only a half per cent. one, as stronger solutions (1½ per cent.) cause already general symptoms as: unconsciousness, disturbances of articulation, vertigo and dryness of the throat. It may be mentioned, that this preparation seems to be well tolerated by the conjunctiva, even if kept a long time in contact with it.

Special Reports.

No. X.—THERAPEUTIC PROGRESS.

JABORANDI IN TYPHOID FEVER.

In the course of an article on this subject in the *Medical Press and Circular*, Dr. Richard Ryder says that, having had his attention called to the value of sudorific treatment in the early stages of typhoid fever, he has used jaborandi extensively, and believes it to be the most valuable we possess, in the early stages, not only of febrile, but in acute and inflammatory affections, whether arising from cold, blood poisoning or other causes. He believes jaborandi to possess the power of eliminating from the human system, through the skin, almost any specific poison, if resorted to at once and before the poison has had time to set up its specific action. He says:

"My attention was first called to this plan of treatment many years ago, by hearing of a gentleman who held the position of resident physician to a large fever hospital. His belief was that he had frequently contracted both typhus and typhoid fever in the discharge of his duties, and his novel mode of arresting it was to mount his horse and ride for ten or fifteen miles, regaling himself on the road with sundry glasses of whisky punch. He would then return in a bath of perspiration, and feel no more of his dreaded enemy.

"A short time after hearing this account, I saw a lady who had been suddenly taken ill with all the premonitory symptoms of typhoid, and as she had suffered but a short time before from that disease, she was convinced in her own mind of the nature of the attack, and on being questioned said: 'I feel exactly as I did when I was sickening for typhoid fever.'

"I immediately resorted to active sudorific treatment, assisted by numerous blankets, covering all with a mackintosh sheet, to prevent the least evaporation. I then kept up the action of the skin till all the abnormal symptoms had subsided. In less than ten hours from the time of commencing the treatment the patient was convalescent, only complaining of weakness. That is more than twelve years ago, and since then I believe I have been the means of arresting a very large number of similar cases.

"The great difficulty I found in most cases was to produce a free action of the skin; if I could only produce that I had little fear for the result. The introduction, therefore, of jaborandi as a therapeutic agent was hailed by me as one of the most valuable additions to our materia medica. I look on it, in the early stages of fever, in the same light as salicylate of soda in acute rheumatism. I have found it reduce the temperature to its normal standard within a few hours, removing at the same time all abnormal symptoms.

"The preparation of jaborandi which I find the most convenient and reliable is the fluid extract. The dose being small, it is not likely to produce nausea or sickness. Some patients are more impervious to its effects than others. So I begin with the minim dose, gradually increasing it every hour till the full action is obtained. The effects are more readily induced by putting the patient into bed between the blankets.

"The sweating usually commences in from three to five minutes, if the dose is sufficiently large and the preparation a reliable one. If there is no action of the skin from the first dose, within the hour I repeat it, giving double the quantity for the next. In conclusion, I must say that I have the most implicit confidence in this plan of treatment, and believe that jaborandi will effectually stop an attack of fever if taken in its first stage. But it frequently occurs that the medical man does not see the case till it is too far advanced to derive any benefit from it."

ANTISEPTIC INHALATIONS IN THE TREATMENT OF LUNG CAVITIES.

In the *Lancet*, Dr. Lawrence Humphrey reports two cases in which cavities in the lungs were treated by antiseptic inhalations, with marked benefit. Dr. Sinclair Coghill's respirator inhaler was used. The following solution was inhaled: two drachms each of the ethereal tincture of iodine and carbolic acid, one drachm of creasote and one ounce of rectified spirits. Ten drops of this solution was used in the respirator, morning and evening. The patient soon learned to inhale by the mouth and exhale by the nose, and was able thus to employ the respirator for one hour, in the morning and evening. In these cases the tuberculizing process had not commenced, the cavities being considered due to the breaking down of pneumonic deposits.

Dr. Thorowgood, under whose care these cases occurred, says:—

"My experience of all kinds of warm steaming inhalations in chronic phthisis has been most unsatisfactory; but in the introduction of this respirator inhaler we seem to have gained some real advance toward a means of checking purulent formation in lung cavities. The creasote, I expect, is the most valuable agent as an inhalant, and it is always necessary to train the patient in the use of the respirator, by teaching him to inspire through the mouth and expire through the nostrils."

KORONIKO IN CHRONIC DYSENTERY.

The *Medical Times and Gazette* says that Dr. J. Jardine, writing from Kiukiang, in the *Chinese Imperial Maritime Customs Medical Reports*, says that dysentery, acute and chronic, was very prevalent in that community during the autumn of 1880. Acute dysentery had generally become subacute or chronic before the patients applied at the hospitals, so that the chronic form had generally to be dealt with:—

"As every one knows, these are the difficult cases to influence speedily by drugs, and with the Chinese a change of air or sea voyage is beside the question. In these cases I was induced

to try koroniko, from the *Veronica parviflora*, which is largely used in New Zealand as a remedy in dysentery and diarrhœa, and some of the results exceeded my most sanguine expectations. Many who received the drug did not return to report themselves; but I have notes of three cases of chronic dysentery, varying in duration from six weeks to four years, and voiding from twenty to thirty motions containing blood and mucus daily. Fifteen doses of tincture of koroniko reduced them to one-half, other fifteen doses reduced them to three or four daily, and a third like quantity effected a complete cure. Judging from the few cases I have been able to follow, I augur a brilliant future for this remedy in the chronic forms of the disease."

PILOCARPIN IN URÆMIC CONVULSIONS.

In the *Medical Press*, July 5th, 1882, Mr. James Lemont reports the case of a laborer, aged 44, who was admitted to the hospital with swelling of the legs and abdomen, and difficulty in breathing, of twelve months' duration. His mother and brothers died of dropsy. He gave no history of scarlet fever or rheumatism, but had been a great drunkard and much exposed to sudden changes of temperature. Urine much diminished in quantity, albumen plentiful, fatty casts. He was ordered acetate of ammonia and compound jalap powder, with a vapor bath every evening. On the second night after admission he had become unconscious and had several convulsions. Chloral hydrate and potass. bromid. (forty grains of each), were given by enema, and a wet pack was used to induce diaphoresis, but without the slightest effect. One-third of a grain of pilocarpin was then injected subcutaneously, and in less than five minutes there was profuse perspiration, which lasted several hours. The patient remained unconscious for twenty hours, but there was no return of convulsions. At the end of a month there was no trace of œdema. The pilocarpin was given once more.

Dr. W. Brown Moir describes, in the *Lancet*, a case of uræmic convulsions and coma in a boy aged twelve, who was suffering from acute nephritis. An injection of a third of a grain of nitrate of pilocarpine and an enema of chloral hydrate were given. Copious perspiration was produced, but the convulsions continued, though less severe. On the following day the same treatment was repeated, with diaphoresis and decided abatement of the convulsions.

As soon as the ability to swallow returned, benzoic acid in two grain doses was administered every hour, and the strength supported by small enemata of beef tea, to some of which was added a little brandy. From the time the power of swallowing returned benzoic acid was the only remedy used, and its use was continued for six days. It was given as above for the first forty-eight hours of that period, and after that in five-grain doses, every three hours. During these six days the patient, though free from convulsions and able to swallow, lay in a semi-conscious state, requiring to be spoken to loudly and shaken, to get him to take anything. His vision was completely lost. He knew no one, could see nothing held up before him, not even a bright light, pupils still continuing slightly dilated. Under the steady use of the acid the urine increased in quantity, grew lighter in color, and the albumen lessened daily. His mind became clear, and vision once more distinct, convalescence being gradually established. Whether the theory regarding carbonate of ammonia circulating in the blood being the cause of uræmia be correct or not (and the recent experiments of Oppler and Zalesky seem to indicate that it is not), this is the second time within my own limited experience of such cases in which benzoic acid has done good service. Whether its mode of action be the conversion of the poisonous alkali into a harmless acid and salt, or in what other specific way it acts, I am not prepared to say, but the above is strictly in accordance with facts.

TREATMENT OF DIPHTHERIA.

The *Medical Press* says that Dr. Deuker, who, during twenty-four years of very extensive practice in the Children's Hospital, St. Petersburg, has treated upward of two thousand cases of diphtheria, and tried all the remedies, both internal and external, employed in this affection, has obtained the best results from the following method, which he has employed for the last ten years. As soon as the white spots appear on the tonsils he gives a laxative mainly composed of senna, which produces an abundant evacuation. When the purgative effect has ceased he gives cold drinks, acidulated with hydrochloric acid, and every two hours a gargle composed of lime water and hot milk in equal parts. Dr. Deuker affirms that when this treatment is commenced early it is generally and rapidly successful.

THERAPEUTICS OF INFANTILE HEREDITARY SYPHILIS.

Although not strictly appropriate to this report, yet this subject possesses so much interest and is so frequently brought to the notice of the physician, that the following lecture on this subject, delivered by Dr. Archambault at the Hôpital des Enfants Malades, and translated from the *Gaz. des Hôp.* by the *Med. Times and Gazette*, will prove of immense service:—

"No question is perhaps more important than that of the treatment of syphilis, especially in an

infant who has acquired it by inheritance. If it is rare in the adult for this to prove a question of life and death, it unfortunately is not so with the new-born child; and accordingly as treatment is well or ill devised, and well or ill carried out, the infant will be cured or will perish. This importance of treatment is such that it ought even to precede birth, wherever that is possible; that is to say, when a pregnant women is averred to be the subject of syphilis. The physician is thus, according to an old expression used in the law courts, *curateur au ventre*. Every woman certainly the subject of syphilis ought to be submitted to the anti-syphilitic treatment of the adult. Intervention should also take place in cases where, although no longer presenting any of the manifestations of the disease, the epoch is yet not distant at which some of the symptoms were observable. Suppose the mother exhibits no traces of syphilis, while the father is syphilitic; it is more difficult to decide. Nevertheless, if you suspect that she has had, unawares to herself, some of the manifestations of syphilis, do not hesitate to intervene; while if you feel certain that she has had nothing of the sort, abstain. I may say that, with regard to all the cases that have come under my notice, every time an infant has been born syphilitic its mother has been the subject of syphilis. Quite lately, I had occasion to observe, in a most honorable family, hereditary syphilis in an infant whose father had a chancre, followed by secondary symptoms, ten years before. He had married only a year ago, and had syphilized his wife, and consequently the infant. We are often consulted on the question whether a young man, formerly the subject of syphilis, can marry with impunity. In such cases we should always act with great severity; in proof of which you have the case I have just cited, of syphilis having been communicated at the end of nine years; and I could give you many other examples.

"Should one intervene on the earliest manifestations of hereditary syphilis? The question should answer itself in the affirmative; but yet some authors maintain that we must wait some time, in order that the infant may bear the treatment without danger. That is, I declare to you, most fatal advice, for you will find the child wasting away, while, on the contrary, if there is anything that can strengthen it, it is active intervention. When the child is suckled by its mother or nurse, you have two modes of treatment, the one complementary to the other—the direct treatment of the child, and the indirect treatment of the mother or nurse, to whom you give the suitable medicinal substances. But this latter mode of treatment is only an adjuvant, and employed alone it would prove absolutely insufficient. How is the infant to be treated directly by mercury? The preferable mode is to administer the sublimate dissolved in water or in milk, with which it will form without any inconvenience (notwithstanding what has been said about it) an albuminate of mercury. Baumès commences with one, one and a half, or two milligrams, progressively increasing the dose to six milligrams in the twenty-four hours; Bertin commences with two milligrams, to reach four, his maximum dose; Cullerier begins with five milligrams; and Bassereau prescribes the dose for an adult reduced to a fourth or a third, which comes to pretty much the same. A milligram and a half seems a very small affair; but if you compare the weight of a child with that of an adult (the mean weight of an infant being five kilograms, while that of an adult is seventy), you will find that the dose advised for infants is comparatively a large one. For my part, I ordinarily commence with a milligram and a half per diem, and, according to the condition of the little patient, gradually reach the maximum of five or six milligrams. All depends upon whether we have to do with a slight syphilis or with grave symptoms. In certain cases, when I have found myself in the presence of a true cachexia with gastro-intestinal disturbance, I have begun with four milligrams from the first day. We may employ the *liquor* of Van Swieten, which is a solution of the sublimate in the proportion of a thousandth part, and which allows the quantity of mercury you wish to give to be very easily dosed. Thirty drops of this *liquor* correspond to one milligram and a half of the sublimate, and I prescribe them to be taken in milk, in three doses, morning, afternoon and evening, increasing by two drops every other day, until the maximum is attained. In the infant you do not find, as in the adult, any positive sign of the mercurial saturation of the organism, and the sole rule you have to guide you is the local and general condition of the child. Thus you will no longer continue to increase the dose when you find vegetations subsiding, ulcerations filling up, and spots disappearing, etc.

"Mercurial treatment has been accused of inducing intestinal disturbances and provoking diarrhœa; but it is exactly the contrary of this which takes place, and, save in some exceptional cases, the diarrhœa, which existed prior to any treatment, disappears almost always under the influence of mercury. Still, should the diarrhœa persist, or should it appear under the influence of a peculiar disposition, you may add, according to its intensity, a half or a whole drop, or even two drops, of laudanum to the *liquor;* or still better, you may prescribe five centigrams of *hydrarg. cum creta* twice a day, to which you may add, if required, half a drop of laudanum. External treatment may be employed either alone, or concurrently with internal treatment; but for my part I only have recourse to it when mercury is not tolerated internally, and on the condition that it is very effectually administered. A gram and a half of mercurial ointment may be rubbed in night and morning, continuing it for a considerable time, and varying the part on which the friction is made, in order to avoid producing eczematous eruptions. For the same reason the frictioned parts should be washed, from time to time, with mild soap. The curative effects of these frictions do not admit of doubt, and in cases of slight manifestation of the disease they may suffice. Nevertheless, whenever it is possible, I associate the internal with the external treatment. Sublimate baths also may be employed as adjuvants to general treatment in cutaneous manifestations of the disease. The dose for an infant is from two to six grams per

bath. This may be used even in any metallic bath, on condition of adding ten to fifteen grams of the chlorhydrate of ammonia, or even of simple chloride of sodium, in order to obviate the effects of the decomposition of the mercurial salt in presence of a metal.

"Such is the mode of treating the general accidents of hereditary syphilis in infants, a treatment to which we must add a good hygiene. Thus, alimentation should be severely watched, and especially if the child is brought up on the bottle, which is the case when the mother will not suckle her infant, and under the difficulty there is of finding a nurse who will consent to suckle a syphilitic infant, in the face of the risks she runs, unless she herself has been syphilized. Great care also must be taken to preserve the infant from the impression of cold, which may induce severe intestinal disturbances. It is well known, in fact, that if syphilis is of more frequent occurrence in warm climates, it is also there cured more easily."

COD-LIVER OIL IN YOUNG CHILDREN.

The *Lancet* says:—

If diarrhœa or vomiting be present—speaking generally, though by no means absolutely—the use of cod-liver oil internally is contra indicated in young children, but if neither of these symptoms be present, we cannot recall a more useful agent in the marasmic conditions of infancy. We cannot fix any limit of age, but we have seen infants of a month old distinctly improve while taking it, and we should have thought the enormous benefit of this agent to rickety children, both under and over twelve months old, had become a truism in medicine. Even in hereditary syphilis, although it will not take the place of gray powder, in our experience, cod-liver oil is a most valuable adjunct in treatment. Also, besides generally helping in the nutrition of a feeble intant, observant mothers often point out that the regular employment of cod-liver oil assists in overcoming the occasional difficulty of constipation.

ETHER AND THYMOL IN CHRONIC RINGWORM OF THE SCALP.

In the *British Medical Journal*, Dr. Malcolm Morris says:—

That chronic ringworm of the scalp is a difficult disease to cure, every practitioner will admit. There are two propositions, as regards treatment, which I desire to bring under the notice of the profession. But, first, I must briefly refer to the factor in the problem we are called upon to consider—a fungus growing on and in the hairs, extending deeply into the follicles, as far as the roots.

In a paper published in the early part of last year, I pointed out that two things were essential in the treatment of this disease; first, some drug which is capable of destroying the fungus, and so preventing its further development; and, secondly, some vehicle to carry this drug to the part of the follicle where the fungus exists and grows. Arguing, from analogy, that certain chemical substances, called antiseptics, had the power of destroying certain low forms of vegetable life, such as bacilli, micrococci, and bacteria, I suggested that thymol or menthol should be used as the parasiticide, and that chloroform would answer the purpose as the absorbent. But, as the latter was volatile, I added oil to the compound, to prevent evaporation. While trying this liniment, of thymol, chloroform, and oil, in a large number of cases, I was struck with the fact that in some of them, in spite of the constant application of the remedy, the disease appeared on other parts of the body, and also on parts of the head previously free. It seemed difficult to understand that, in a strictly antiseptic medium, spores could be carried from part to part and live; but such seemed to be the case, for in some instances, when the liniment had been used too freely, and had run down the neck, fresh spots of the disease showed themselves in that region. During the time I was considering this difficulty, I found that Koch, in Berlin, had been making experiments on bacillus spores with various antiseptics, and found that these spores lived and developed even after being placed in carbolic oil (one part in twenty) for one hundred and ten days. This, I think, is a very strong argument that neither oil nor fat of any kind should be used when the full action of an antiseptic is required.

Of course, I am fully aware that all the best authorities recommend strong ointments, mercurial or otherwise, though for a very different reason from that I have been describing. They care little or nothing about the antiseptic action, so long as inflammation of the follicle, more or less severe, be produced. The spores are said not to live in inflammatory products (Thin). But surely cases are not uncommon in which the disease is transplanted to healthy parts by means of the discharge. I have seen a case in which croton oil was used to a single patch, and in a short time the head was covered with small centres of infection. In this case, the spores were carried in the discharge.

And, again, have not all the old chronic cases we see in practice, some of them of four or five years' duration, been cases treated by constant attacks of inflammation, and yet with the result that spores have been found with ease? My view is that to produce inflammation of a slight kind is useless; and that a severe kind is unjustifiable, on account of the risk of destroying the follicles altogether, and producing baldness.

To return to the question of fats: if fat of any kind from without protects the spores, as Koch asserts, the natural fat or sebaceous matter must have a similar effect. For this reason, I have tried to remove the fat by means of ether, and have abstained from using ointments or oil in the treatment. I wash, or more strictly dab, the patch each morning with ether, rectified spirits of wine and thymol, in the following proportions: ether, five drachms; rectified spirits of wine, two drachms and a half; and thymol, half a drachm—applying during the day glycerine with a very small trace of perchloride of mercury. Petroleum may be used in the place of the ether and spirit. One drachm and a half of petroleum oil takes up five grains of thymol. The ether or petroleum is of greater value than would at first sight appear, and for the following reason: There is a disease of the scalp known as

seborrhœa sicca, the chief characteristic of which is the falling out of the hair. This is caused by the absence of the natural fat in the sebaceous matter. It is cured by stimulating the glands to action, and by adding fat artificially. In the ringworm patch, we want the diseased hairs to fall out; and, by producing a condition similar to seborrhœa sicca—that is, by making the part very dry—we can actually produce this effect. Instead, therefore, of epilating by means of forceps, which is useless, as the hair breaks at the neck of the follicle, leaving the diseased part behind, we can epilate by dissolving the fat, and thus loosening the hair. In this way we can in a few days remove all the broken and diseased hairs.

THERAPEUTIC PROPERTIES OF QUINIA IODATE AND BROMATE.

At a recent meeting of the Medical Society of the College of Physicians in Ireland (*British Medical Journal*), Dr. Charles A. Cameron read a paper on the therapeutical and physiological properties of these new salts, which he had recently had prepared and introduced to the notice of the medical profession. He pointed out that the researches of Arthur Gamgee, Priestley and Larmuth had shown that the three forms of phosphoric acid and of vanadic acid had very different degrees of physiological activity. The salts of orthophosphoric acid were almost inert when their bases were inactive, while the pyrophosphates and metaphosphates were poisonous. The orthovanadic acid was poisonous, but pyrovanadic acid and metavanadic acid were still more poisonous. The high physiological activity of the pyrophosphates and metaphosphates had been attributed to the unsaturated condition of their nuclei; these salts were not statical, for they could take up additional basic material. Further, when superoxygen compounds were introduced into the system, it might be expected that their oxygen, being loosely combined, would unite readily with elements of the blood Dr. Cameron believed that the chlorates, bromates and iodates were more active physiological agents than the corresponding chlorides, bromides and iodides. Chlorate of sodium was more powerful than chloride of sodium or common salt. It might be inferred from analogy that iodate of potassium was a more active physiological agent than iodide of potassium. Some years ago Dr. Cameron suggested the use of ferric iodate as a substitute for the unstable ferrous iodide, and more than a year ago he had prepared an iodate of quinine in combination with an effervescing mixture. Each drachm of the effervescing iodate of quinine contained two grains, or one dose, of the iodate. It had been found very useful in the treatment of neuralgia, severe articular pains which had resisted the employment of the usual remedies, sluggish forms of pulmonary congestion, secondary syphilitic disease, and malarial enlargement of the spleen. Bromate of quinine might be prepared by precipitating barium iodate by sulphate of quinine, or by neutralizing quinine with bromic acid. It occurred when air-dried in small asbestos-like masses, which under the microscope was seen to consist of very long needles.

Dr. H. Colpoys Tweedy had seen good results from iodate of quinine in pulmonary congestion. Brigade Surgeon Jackson asked what was the relative expense of these new preparations compared with sulphate of quinine, with the action of which in intermittent fever he was much disappointed. Dr. Quinlan considered that the useful feature of the iodate of quinine consisted in the fact that its acid easily separated from it, thus leaving it circulating in the blood in a basic form. Mr. Knott had no doubt that the large proportion of easily dissociated oxygen present in both the iodate and the bromate of quinine would add materially to the physiological activity of these drugs. He should not be surprised to hear of the bromate of quinine proving a specific in some forms of neuralgia, as the sedative effects of the bromine would be added to the usual action of quinine. The forms of neuralgia in which the latter drug had given best results were those in which evidence existed of malarious or rheumatic influence. In both these cases there was a marked determination of blood to the part, and the periodic dilatation of the blood vessels which occurred in the former varity—every pulsation of which was conveyed to the over-sensitive nerves which accompanied them—was well known. He believed that there was sufficient evidence in favor of the idea that the more prominent physiological effects of quinine were essentially due to diminution of the systemic oxidation which took place under the influence of this drug. It had also been observed to diminish the metamorphosis and elimination of nitrogenous compounds, especially uric acid. The excess of oxygen in the newly described salts would probably act as a beneficial corrective. The capillary contraction which followed the ingestion of quinine promoted the same results as that now described. Dr. Cameron, in reply, said the great point he had endeavored to establish was that the addition of oxygen to the iodine compounds, instead of diminishing, increased their activity.

(To be Continued.)

CORRESPONDENCE.

Carcinoma of the Stomach.

ED. MED. AND SURG. REPORTER:—

I submit the following brief history of a case of carcinoma of the stomach: David Leavitt, American, occupation farmer, aged 44 years. Served as a soldier in the late war. Since his discharge from the service, had suffered more or less continually from chronic gastric and intestinal catarrh. During the last three years of his life, and until within two months of his death, he had received no treatment from the hands of a physician, but had taken a great many different nostrums advertised for deranged digestion. When first called to see him, I found great emaciation. He complained of no pain, save a sense of uneasiness in the right hypochondriac, and oppression in the epigastrium, vomiting, at intervals of twenty-four to forty-eight hours, of great quantities of fluid intermixed with considerable "coffee ground" material. Upon the most careful and repeated examinations no tumor

could be discovered, though the walls of the abdomen nearly approached the vertebral column. There was a pronounced cancerous cachexia, and a diagnosis of carcinoma of the pyloric orifice was rendered. The patient rapidly failed, and death resulted, from inanition. Twelve hours after death an autopsy of the abdominal cavity was permitted. The stomach was considerably dilated; along the upper border of the lesser curvature, extending from the pyloric orifice two inches, there was infiltration of the tissue, feeling rough, knobby and somewhat lobulated; this infiltration also extended through the pyloric orifice, into the duodenum for two inches, completely filling the orifice and intestine. The other viscera were, apparently, free from any cancerous appearance. The pathological condition was regarded as a colloid form of carcinoma. The case is of peculiar interest, from the fact that the most important and almost pathognomonic symptom of gastric carcinoma was absent, the presence of a tumor.

Tracy, Minn. CLAUDE M. FERRO, M.D.

Complete Lateral Dislocation of the Elbow Joint

ED. MED. AND SURG. REPORTER.

A short time back the following case came under my notice: H. C., a large, bony man, was driving a colt to a dog-cart, when the colt shied off to the side of the road and threw him from the cart. In his fall his left arm was caught in the wheel and a complete outward dislocation of both bones of the forearm produced. I saw him about an hour after he received the injury. Having placed him well under the influence of ether, I made a careful examination of the joint, when I found the following condition of things: The radius and ulna were both dislocated from their articulating surfaces on the humerus. The olecranon was twisted around nearly in front of the joint, passing completely over the external condyle, while the head of the radius was dislocated forward and inward, the cup-shaped extremity of the head of the radius being easily felt through the integument of the arm. With the assistance of my father, Dr. Edwin C. Leedom, I succeeded in restoring the displaced bones to their proper position. We were unable to detect any fracture, both bones appearing to be intact. Nearly all the authorities who have written on this subject agree in saying that the most common cause of this accident is a blow upon the inner side of the forearm or the outer side of the humerus, or from the action of two forces pressing upon the arm in opposite directions in close proximity to the joint. A fall upon the hand is said to have produced it, which I think must certainly be a mistake. I do not see how a fall upon the hand could possibly produce such an injury. I can readily understand how it might be produced by two forces pressing in opposite directions near the joint, one upon the outside of the humerus, the other upon the inside of the forearm. But it seems to me that the most usual cause of this injury would be a violent twisting, such as this man's arm received in the wheel, or the twisting caused by revolving machinery. So far as I can learn, a complete internal dislocation has never been recorded. The force applied in this instance must have been very great, and the laceration of ligaments about the joint considerable; nevertheless, the patient made a good recovery, although there is some loss of motion and stiffness in the joint. This case was one of unusual interest to me, not only on account of the rare form of the injury, but because it seemed to me almost impossible that the ulna could be so twisted around without sustaining a fracture of the olecranon; yet such was the case.

OSCAR LEEDOM, M.D.

Montgomery Co., Pa.

NEWS AND MISCELLANY.

Preliminary Examinations for the University of Pennsylvania.

In order to facilitate the admission of students and to aid the upward tendency of medical education, the authorities of the University of Pennsylvania have appointed physicians, graduates of that school, in the different prominent cities of the Union, remote from Philadelphia, whose duty it shall be to examine candidates for admission into the Medical Department. The result of the examination is forwarded to the authorities of the University, who, in turn, notify the candidate of his success or failure. By this means the applicant is spared the expenditure of time and money necessary to a trip to this city on an uncertainty.

An Appropriate Reference.

A physician in Texas writes us: "I beg leave to call the attention of G. C. Savage, M.D., of Jackson, Tenn., who gave the profession, in your last issue, his 'discovery that hypermetropia and astigmatism, either alone or combined, are the cause of sick headache and that a properly fitted glass is the cure for it,' to the article of Prof. S. Weir Mitchell, M.D., in your valuable journal, No. 909, August 1st, 1874, pages 81, 82 and 83, also No. 936, February 6th, 1875, pages 101 and 102."

Anniversaries.

April 24th, Prof. Henle, the celebrated anatomist in Gottingen, celebrated his 50th anniversary as physician. Many eminent persons were present. Nearly all Universities of Germany sent congratulations to this rare festival.

April 18th, Prof. von Arlt, the well-known ophthalmologist in Vienna, celebrated his 70th birthday.

Items.

—Mr. T. Spencer Wells, Surgeon to the Queen's Household, has been elected President of the Royal College of Surgeons of London.

—Dr. George J. Grimes, of Columbus, Ga., reports (Atlanta *Med. Register*) a successful ligation of the femoral artery, for traumatic aneurism.

—Two hundred and twenty thousand pounds of quinine are consumed annually throughout the world, about one-quarter of which is used in the United States.

—Japan has now six medical journals published in the native language.

—Dr. W. B. Carpenter, F.R.S., is announced to deliver the next Lowell lectures at Boston.

—Prof. William H. Pancoast has had executed a bust of his father, the late Prof. Joseph Pancoast, for presentation to the Jefferson Medical College.

—The Sultan of Turkey has given a site in Jerusalem for the purpose of erecting a hospice and ophthalmic dispensary, under the auspices of the English branch of the Order of St. John.

—The honorary degree of D.C.L. has been conferred by the University of Oxford on Sir William Muir, M.D., K.C.S.I., Member of the Council of the Secretary of State for India; and Dr. Allen Thomson, F.R.S., formerly Professor of Anatomy in the University of Glasgow.

OBITUARY NOTICES.

DR. DANIEL M. ELLIOT.

Dr. Daniel M. Elliot, of Peabody, Mass., died July 26th, aged 39 years and 9 months.

Dr. Elliot was born at Littleton, Mass., October 9th, 1842. He received his preparatory education at Pembroke, N. H., and entered Dartmouth College, where he graduated, in the class of 1864, at 21 years of age. He was afterwards teacher in the high school at Castine, Me., and also at McIndoes Falls Academy, Vt. He entered Harvard Medical School in 1866, graduating therefrom in the spring of 1870, and returning to his native place, where he commenced the practice of his profession. At about this time he was married to Miss Sarah A. Child. He soon removed from Littleton to South Deerfield, Mass., where he remained until the spring of 1877, when he moved to Peabody, where he continued in practice until his last sickness. The autopsy showed that he died from meningeal congestion with effusion.

It can truly be said of Dr. Elliot, that those who knew him best loved him most. Possessed of a sensitive nature, and of unobtrusive ways, he was not as well calculated for making his way among strangers as many of inferior abilities. He lived a strictly conscientious life; while despising a mean act, no one was more ready to forgive and overlook a fault.

A great loss to those who had chosen him as their family physician; none, however, can feel his absence more keenly than those of his own profession, with whom he was associated.

This world was indeed better because he lived in it. P.

DR. G. EDMUND BREHMAN.

Dr. Brehman died suddenly, of neuralgia of the heart, at his office, in Altoona, Pa., on the afternoon of July 20th. He was born on July 12th, 1846, at McVeytown, Mifflin county, Pa., and was educated at the McVeytown Academy. He read medicine in the office and under the instructions of Dr. A. Rothrock, of McVeytown, and after the full term of study was graduated doctor of medicine in the medical department of the University of Pennsylvania, March 13th, 1869. He located in Altoona in 1869, and after practicing one year removed to Oshkosh, Michigan, where he remained one year and then returned to Altoona in 1870, and has practiced there continuously ever since. He was married April 29th, 1878, to Miss Susan Jessie Smith, daughter of Mr. S. H. and Mrs. Susan A. Smith. Dr. Brehman was a member of the Blair County Medical Society, of the Juniata Valley Medical Association, of the American Medical Association, and of the Altoona Academy of Medicine and Surgery.

DR. J. V. SCHENCK, OF CAMDEN, N. J.

Dr. John Voorhees Schenck, one of Camden's most prominent physicians, died, July 25th, at Atlantic City, of typhoid fever. The deceased was fifty-seven years of age, and was well known through West Jersey, and especially so in Camden, where he practiced his profession for thirty-four years. Dr. Schenck was a son of Dr. Ferdinand Schenck, of Cumberland county, New Jersey. He was educated at Rutger's College, and graduated from that institution as a physician. Afterward he went through another course at the University of Pennsylvania, and graduated from there with high honors. The deceased was to Camden almost what Drs. Gross and Pancoast are and have been to Philadelphia. He was regarded as thoroughly skillful, both as a surgeon and a physician, and enjoyed one of the largest practices in that city.

QUERIES AND REPLIES.

Subscriber.—The directions for changing the old into the metric system will be found in the "Physician's Daily Pocket Record," published at this office.

J. G. K. who has used amyl nitrite for lumbago, as recommended in our issue of July 22d, desires information on the following points, from the readers of this journal who may see it:—

1st. Do not patients find the excessive burning pain caused by the solvent too great to allow the full amount of 10 ♏ to be injected.

2d. What other solvent could be used that would cause less pain.

MARRIAGES.

EVANS—MOORE.—On the 18th of July, by Rev. Bishop Simpson, Dr. William D. Evans, of Denver, Col., and Miss Ada J. Moore, daughter of Mrs. E. H. Moore, of Chester Springs, Pa.

RANSOM—BRISBANE—In St. John's Church, Richfield Springs, July 18th, by the Rev. Robert Granger, Dr. George Manley Ransom, of Richfield Springs, and Margaret Lawrence Brisbane, youngest daughter of the late William Brisbane, of South Carolina.

WINSLOW—BISHOP.—On Wednesday, July 12th, at the bride's residence, by the Rev. H. C. Badger, Dr. John Winslow and Mrs. Elizabeth Hamilton Bishop, both of Ithaca, N. Y.

DEATHS.

BRUSH.—At Norwalk, Ct., July 8th, 1882, Francis V. Brush, M.D.

GANISON.—On the 19th inst., at his residence, Newburgh, N. Y., Dr. Isaac Ganison, aged 80 years.

GLENNEY.—In New York, on July 17th, of consumption, Dr. Geo. H. Glenney, in his 41st year.

SCHENCK.—At Atlantic City, on July 25th, 1882, John V. Schenck, M.D., in the 58th year of his age.

THE

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Communications.

BRIGHT'S DISEASE; PATHOLOGY AND TREATMENT.

BY FRED. HORNER, M.D.,
Of Salem, Va.

According to the monthly reports of the National Board of Health, this malady prevails in country and town, affecting males more than females, at an advanced period of life; indeed, it may be said that granular degeneration of the kidneys is a common disease as life advances. Dr. Mahomed has published a table which shows that in persons dying from all causes, above the age of 50, 62 in 150 have granular kidneys. On shipboard it is rare, because, perhaps, the crews, especially of naval vessels, are recruited and picked men; the officers are not so exempt. For several years past no single neighborhood in the rural portions of Virginia has failed to present examples of the disease in both sexes; the drinking of ice water during the entire year, and of alcoholic stimulants, are considered to predispose to this affection.

For convenience, the subject will be treated under two heads, viz.: First, or the acute form—diffuse nephritis, where the kidney is large, weighing eight to twelve ounces. On section the cortical portion is thick, pale and anæmic, and marked with yellow spots, and the epithelium of the tubes is infiltrated with an albuminoid, granular substance. Hyperæmia is a prominent feature, with congestion of the kidney, which weighs twice or even four times as much as in health. The cortical portion is twice its ordinary thickness. In an excellent monograph, by I. F. M. Geddings, M.D., of Charleston, S. C., "the contents of the tubules are described to be completely converted into detritus, and removed partly by absorption, and in part conveyed away by the urine, and the Malpighian corpuscles are contracted and in a condition of sclerosis. The granulations vary from the size of a millet seed to that of a small pea. The essential character of the disease the learned author considers to be a morbid deposit in the substance of the kidney, attended by an abolition of function, with atrophy of the healthy structure of the gland, the presence of albuminuria, diminished specific gravity of the urine, an altered state of the blood, and dropsical effusion."

The symptoms resulting from the above pathological changes are those of acute nephritis: General ill health, dyspepsia, dyspnœa, palpitations of the heart, frequent micturition, imperfect vision, slight fever, trouble the patient for a long while, and for the relief of which, in the majority of cases, he will resort to empirical remedies.

Second or chronic stage, parenchymatous nephritis: the epithelium of the cortical tubes is thickened and infiltrated with an albuminoid substance in the form of granules, which later are replaced by molecular fat and oil globules. The specific gravity of the urine is considerably diminished, falling from 1.010 to 1.005, with an excess of albumen and deficiency of urea, the latter being detected in the blood. The albumen, which in healthy blood is 65 in 1000, in this disease is reduced to 16 parts. The urine, which amounts in health to 40 ounces in 24 hours, in this disease the patient voids only 12 to 16 ounces.

Examples, however, occur in the advanced stages, in which the quantity of urine is not below the standard of health. The red corpuscles of the blood are sometimes reduced to one third of their normal proportion, and the skin assumes a weaker, cadaveric color, due, it is supposed, to a lack of vigor in the assimilative processes. In the midst of the congested parenchyma is a granular mass, impervious to the finest injection; the outer surface is pale and rough to the touch. The natural structure finally disappears, through absorption, by pressure of the new deposit. Charcot, on examination with the microscope, found the changes to be localized in the convoluted tubes; "the tubules are blocked by the deposit of fibrine plugs, and the color of the kidney is yellowish and gives to the organ a granular appearance." The effect upon the urine is claimed to consist in the diminution of its quantity, in the presence of albumen, and in the deficiency of urea and saline matters, in consequence of which the serum of the blood with its albumen passes readily, while the saline matters and urea are checked. Dropsy is an associated disease, and when present with the symptoms of granular degeneration of the kidney, there can be no further doubt as to the nature of the affection. An anæmic condition accompanied by organic disease of the heart and lungs are sure precursors of a fatal result. Out of 100 cases recorded by Dr. Bright, there were only 27 in which no cardiac disease could be detected; in 52 there existed hypertrophy; in 18 valvular disease, and in 11 the aorta was affected, all of which were considered to be due to the existence of anæmia.

The chronic vomiting which attends the closing scene he refers to the cardiac affection, and is merely functional. In a late number of the *Lancet*, Robert Sandys, M.D., discusses the influence of Bright's disease in developing latent valvular disease of the heart, and assumes that a common cardiac lesion is dilatation attended by a systolic mitral murmur, succeeding an attack of rheumatic fever." This author further asserts "that chronic Bright's disease is a cause of atheroma of the aorta and of the aortic valves."

As in the acute stage, so also in the chronic, the true nature of the disease may, for some time, be undetected. An early symptom of chronic Bright's disease is amblyopia and other derangements of vision, along with obscure lumbar pains, and pallor of the complexion, presenting a peculiar, ashy whiteness; the features appear blighted and the hair changes its natural color to the premature hue of old age, which, with the existence of tube casts and albumen in the urine, may be assumed to be invariably pathognomonic of Bright's disease. Here it may be added that the proper method for testing the urine, *e. g.*, with heat, if the phosphates are suspected to be present with albumen, nitric acid should be added to redissolve them. If the urine be alkaline, heat will fail to coagulate the albumen, unless the alkalinity be removed by a few drops of acid.

Treatment.—The fact that congestion and hyperæmia of the kidneys, with severe pain, and fever in the acute stage of granular degeneration exist, would be suggestive of the judicious use of local depletives to the lumbar region, dry or wet cups, anodynes, and active but not drastic purgatives; for example, the solution of citrate and bitartrate of potash combined with a few drops of dyalised iron. Active medication is not so important as attention to diet; rest, healthful recreation, and travel, and what is now esteemed to be a sina quo non, prompt resort to suitable mineral springs or the use of the waters which have proved by experience to be beneficial if not actually curative.

By way of illustration of the treatment of the chronic form of Bright's disease, the following details of a case successfully treated may be given: Dr. Henry Frost, late of Charleston, S. C., invited me to a consultation with him. The patient was a man of 50 years old, the son of a physician, in early life was thriftless and dissipated, and for several years past had complained of general ill health, dyspepsia, shortness of breath, and palpitations of the heart. During the spring of 1881 he suffered from an attack of nephritis. On examination the urine was found to contain albumen. For this affection he had been appropriately treated by Dr. Frost. In the month of June the cardiac distress was increased, œdema of the eyelids and right leg was observed, accompanied by nausea, severe pain in the hypogastrium, diplopia and slight amaurosis. Six weeks later there was general dropsy of the abdomen and inability to lie down. Epsom salts, ℥ iss, dissolved in a quart of water, in the quantity of a wineglassful, was administered three or four times daily; also

℞. Fluid extract jaborandi, gtt. x
Tinct. digitalis, gtt. xv.
Ter die.

The fluid extract jaborandi caused nausea and was suspended. Emulsio balsam copaiba and tolu, with muriated tincture of iron, were substituted for it, and continued for several weeks. The dropsical fluid was discharged from the legs, after acupuncture, by the gallon, during his illness, and painful

sores and hemorrhoids contributed to the distress of the patient; nor did he escape from the dangers incident to so serious a disease and its complications. At times was delirious and comatose, and presented all the symptoms of uræmic poisoning. He was rescued more than once by the prompt use of large quantities of alcoholic stimulants, and careful nursing day and night. His diet was skimmed milk, fresh meats, fruits, etc., especially grapes, and the use of Buffalo Lithia water, from spring No. 2. Under this treatment the dropsy of the abdomen, legs and face began to disappear. The patient was then given "alum and iron mass," prepared by Landrum & Litchfield, druggists of Abingdon, West Virginia. This salt was given with reference to its tonic and astringent properties, and contributed to improve the digestion, to promote absorption, and to restore the properties of the blood. By the month of October this patient recovered sufficiently to travel and visit a brother residing in the city of Richmond. There he was submitted to the care of Dr. W. B. Gray, who instituted, I am informed, the following treatment, for the sequelæ of the case:—

℞.	Rad. scillæ,	ʒ ij
	Tart. ant. and potass.,	gr. j
	Potass. sulphatis,	ʒ ss
	Potass. bitartratis,	ʒ iss.

Teaspoonful three times daily.

For the relief of the cardiac symptoms—

℞. Tinct. veratri, gtt. iv

ter die, was also ordered. He was also advised to use the waters obtained from the New Kent mineral springs, containing lithia; they are generally prescribed by the physicians in Richmond.

During the month of November this patient returned home, his dropsy entirely cured and not a trace of albumen in the urine. At the present time, on careful physical examination, he may be pronounced relieved. His complexion, appetite and strength mark the well man. The urine has resumed and retains the healthy character, is normal in quantity and specific gravity.

For the encouragement of such a patient, the opinion of G. B. Wood, M.D., "Practice of Medicine," may be quoted: "I have a distinct recollection of two severe cases of inflammatory dropsy, with strongly coagulable urine, of which one occurred nearly twenty and the other thirteen years since, and both perfectly recovered without subsequent relapse." Other later and eminent authors are of the opinion that dropsy dependent on Bright's disease is prone to recur.

THE INNOVATIONS OF MEDICAL AND SURGICAL PRACTICE.

BY J. M. F. GASTON, M.D.,
Of Campinas, S. Paulo, Brazil.

(*Concluded from p.* 201.)

This naturally brings up the mooted point of the "survival of the fittest" ligatures, as, after all the experiments of silk, metallic, catgut and caoutchouc loops for securing arteries and pedicles, there seems to be a tendency to settle down upon the silk ligature as affording all the requisite conditions for security and freedom from undue irritation, with a remote prospect of final absorption. It is calculated to puzzle the inquirer after the stable and trustworthy in surgical appliances, to note the vacillation of high authorities in regard to this apparently simple practical selection of a ligature; and while it is commendable to try all and hold fast to the best, we cannot, if we would, forget the splendid tribute of Dr. J. Marion Sims to the silver wire ligature, in his address, some twenty five years ago, before a distinguished audience in the city of New York, upon his first presentation of his improvement in operating for vesico-vaginal fistula to the medical men of that city.

His claims for this mode of ligation have not been belied by subsequent experience; and it is a matter of surprise that with its invariable good results and its capacity to remain encysted in any order of tissues, there should be a disposition manifested to abandon it for the doubtful recourse of other means. I recall vividly the fact of testing the silver wire suture about the time it was brought so prominently to the notice of the profession, in reuniting the tract of the small intestine after three pieces of eight or ten inches had been cut away, by a man under the influence of delirium tremens, in Columbia, South Carolina, and the happy result in saving the life of the would-be suicide, the perpetrator of this act of desperation. Since that time it has been used by hundreds, and even thousands, with like salutary results, in all varieties of cases, without disappointing their legitimate expectations in a single instance.

As the applications of elastic ligatures are thus far limited to special conditions, and for the most part to effect temporary constriction, this mode of ligation may be considered *sub judice* on the part of surgeons. It is an innovation that promises to accomplish what none of the others can claim to do, in affording a steady and graduated compression upon the included tissues, without risk of laceration or cutting the texture of such parts. If we are to accept the high au-

thority of Olshausen, the elastic ligature, "when left in the abdomen, after having buried itself deeply in the tissues, becomes encapsulated and harmless." Others have applied it to the pedicle after the excision of various parts, and with invariable good result; so that its extension to the ligation of large vessels generally seems to be warranted; and it may be inferred that a simple elastic ring should prove adequate to the necessary constriction of the umbilical cord, thus obviating a not infrequent accident of secondary hemorrhage from the cutting of its soft substance by the ordinary mode of ligation.

The caöutchöuc tube presents special advantages in cases requiring a uniform compression; yet the round solid cord or flat strips of this material are applicable in a great variety of circumstances demanding a ligature, and if we can rely upon the tolerance of the vital organization for retaining this vegetable substance without giving rise to any irritation or suppuration, the application of the elastic ligature to the arteries in amputations admits of the flaps being closed up at once throughout their entire extent, thus securing complete occlusion.

That restless desire for change has led to multifarious trials of other materials, yet it is, of all, perhaps the very best thing which can be left in contact with the susceptible tissues of the human organism in the form of suture or ligature.

If Mr. Bryant's recommendation of torsion of arteries, without ligation, is sustained by more enlarged experience, the arrest of hemorrhage is settled for all time, and it should be hailed as the greatest advance in modern surgery.

This simple process has long been applied to small arterial twigs when divided in the course of an operation, but this bold proceeding of arresting the flow of blood from a large arterial trunk, such as the femoral, and relying upon torsion alone to secure the closure of the vessel is, so far as I am informed, a novelty, whose reach can only be appreciated by those who know the real difficulties connected with the application of ligatures to the main trunks of the arteries. It is claimed, and sustained by reference to cases, that when the proper tissues of the artery are twisted eight or ten circuits upon its own axis, no blood will be lost, either primarily or secondarily, and that there is no sloughing of the extremity upon which torsion is thus executed.

In view of the representations as to the favorable results of this process in the hands of Dr. Bryant, it would seem that surgeons are authorized to put it into practice; yet it should be used with all the conditions and precautions under which it has been performed by that distinguished operator; and it is especially inculcated that the artery shall be detached from its surrounding investment, and drawn out, preparatory to twisting the extremity. Should this be done in a bungling manner, and serious consequences ensue, it would bring discredit upon the operator, and I take it that any one undertaking this process upon the femoral should not only be especially careful in the observance of the details in performing it, but should be extremely watchful of the case for several days subsequently; watch and wait, in faith.

The transplanting of tissues is no longer limited to removal of the skin from one part to another of the same individual, or from the living body of one individual to that of another person; but the skin has been removed from the dead body several hours after life was extinct, and transferred to a living being, with reproduction of vitality in that portion of the cutaneous investment so transplanted. It has likewise been demonstrated that ossific matter may be engrafted upon the bony structure, being taken from the same or a different individual. Thus deficiency of bone has been supplied, and it is within the scope of surgery to replace segments of necrosed shafts or to supply the substance that may be lost in resection of the bones of any part of the body. Artificial joints, resulting from degeneration of ossific deposit in cases of fracture, have thus a reasonable prospect of relief, maintaining the entire length of the member; and in like manner it may be anticipated that the aperture of the cranium resulting from the operation of trephining may be closed. If the cutaneous substance can be taken from a dead body, as has been demonstrated, and regain its vitality by contact with living parts, there cannot exist any insuperable difficulty in the transfer of a section of bone from the head of a decapitated culprit or from one that is hanged, to the cranium of a living subject, so as to fill up a vacancy that may exist. The occasion for such an operation may be opportunely selected, as it is not requisite or desirable that it should be done at the time of the trephining of the cranium, but subsequently, when the scalp may be reformed.

The audacity of practical innovation is not exhibited in anything more strikingly than in a case reported by Rosenstein, of Leyden, in which the pericardium was laid open and two drainage tubes inserted into the cavity of the sac, with the restoration of the patient, after four months of this treatment, for a purulent effusion. It was not enough that this investment of the

citadel of life should have been invaded previously by the aspirating needle, but this daring pioneer has ventured upon the far more perilous undertaking of drainage from its cavity, and with a salutary result. It would really appear that surgeons of the present day are actuated by sentiments very similar to those venturesome heroes who, during the last quarter of a century, have been striving to reach the North Pole; and the ultimatum with each is, who can go furthest!

An old idea has been recently revived, with more zeal than discretion, in seeking to supply the deficiency of vital fluid by the transfusion of the blood from one to another, or the introduction of defibrinated blood, milk, or the saline solutions into the veins or arteries, and likewise by the injection of blood into the peritoneal cavity. It has been also gravely claimed that, independent of any lack of blood for the nourishment of the body and the performance of the ordinary vital functions, in cases of mental derangement, the blood of the subject of lunacy may be removed and replaced with healthy blood, with decided advantage to the sufferer, and that the experiments made have given encouragement for their repetition. The absurd denouement of the experiments and deliberations upon the various articles adapted to replace or modify the natural production of the vital fluid is a preference for simply diluting the blood with a saline aqueous solution injected into the venous circulation. Why might not this same end be well reached by filling the colon with the said solution and leaving it to be absorbed, or to effect the desired modification by the process of endosmose and exosmose through the coats of the large intestine, and thus altogether obviate the risks of introducing the fluid directly into the circulation.

The proceeding most in conformity to a natural process for replacing the lost fluid would seem to be that of transfusion from the vein of the arm in the person supplying the blood to a corresponding vein in the person who is to receive it, maintaining the temperature in the passage and securing against any contact with the atmosphere It is thus and thus only that a removal of the circulating fluid without material modification can be effected; and if it should be my misfortune, by any accident, to lose such a quantity of blood as to endanger the recuperation of my forces, I should risk this in preference to the other measures which have been suggested for replacing the blood. In the transfer of blood from one body to another, there should, of course, be observed all the precautions possible to secure correspondence in the quality of that supplied to that lost or to the remnant for augmentation.

The outstretched arm of aggressive, and if we may so style it, progressive surgery, has laid a violent hand upon the liver, and seized especially upon the gall bladder for a trial of skill and daring interference with its disorders. Although the results thus far have not given assurance of final triumph, enough has been accomplished to embolden others to hope for success, and with the advancements in abdominal surgery, it should not surprise us if dilatation of the ductus choledochus should be effected by an opening into the duodenum; or if this tract should be obliterated, there should be maintained a direct communication of the gall bladder with the intestinal canal by uniting them with sutures after making the requisite orifice in each for the passage of the contents of the gall bladder. We know already that an ulcerative process has accomplished this communication in entire obstruction of the gall duct, and I have good and sufficient reason to believe that a patient of mine has realized this abnormal change, and is now in the enjoyment of a fair measure of health. It must be taken for granted, in this case, that my diagnosis, made while the acute symptoms were present, and given to a colleague who was in attendance with me on the patient, was correct, as there can be no opportunity afforded for verifying it, except by a post-mortem examination. In view of the probability of a restoration of the bile to the alimentary canal, an operation to effect this union promises far better results than the fistulous discharge of the gall bladder externally.

The hydropathic treatment of pneumonia, croup, etc., has been heretofore confined to specialists, but some prominent members of the medical profession, being actuated doubtless by the sentiments of the pastor who declared that the devil should not have all the good music, have experimented and approved the water cure in various affections. With the recommendation of Dr. Austin Flint, and the detailed observations of cases treated in this manner, there cannot be a doubt of the safety and efficiency of the application of towels wrung out of cold water to the chest in pneumonia. We have ample testimony from Germany and other parts, of the advantages of cold baths in fever, and in all cases of elevation of the temperature of the body. This practice is not by any means recent, yet its recognition and adoption by the profession in this country is a novelty, so that it is entitled to consideration under this head of innovations. I have no

sympathy with that hide-bound policy of rejecting any course of treatment, because it has been resorted to by quacks. Let us profit, if possible, by even the rash experiments of the empiric, and cull from the vast field of tares the little sound grain that might be useful to us in treating the "ills to which flesh is heir." The botanic practice of Thompson, though false in theory, brought into notice the properties of some important articles, and among them, the great virtues of lobelia inflata and the capsicum annuum, by which the regular profession has profited vastly. The steam vapor bath and the enveloping in blankets, which were used, or rather abused, by the disciples of the said Thompson, enabled judicious observers to turn to account that part of the practice which proved to be efficacious, so that a benefit was unwittingly thus conferred by these experimenters upon the resources of art and nature without regard to science.

We must not even ignore the negative results of homœopathy in leading to a just appreciation of the vis medicatrix naturæ, and hence to the adoption of the expectant masterly inactivity in some forms of disease. This delusion is simply the shadow of nothingness, and should rank in the scale of curative means not as zero, but really as "naught without the rim," or as a minus quantity in the estimate of resources in the treatment of any disorder of the human organism. How it has happened to have adherents among intelligent people is totally incomprehensible, except upon the principle that "if it does no good, it does no harm to the organization, and serves as a toy to tickle the fancy.

The prevailing spirit of active interference in the practice of medicine, and of operative procedure in surgery, needs, perhaps, to be somewhat curbed by a little patient watching of symptoms, and we have learned, by the manner in which "diseases drag their slow lengths along," under the time serving ordeal of expectancy, that no serious trouble ensues from some disorders by this delay in the application of energetic means of treatment. This course could not be applicable to all cases, as there are diseases which exact the earliest and the most stringent measures to arrest their development. This aggressive policy recommends itself whenever the way is clear for action, and whatever our hands find to do we should do it with all our might. Caution in diagnosis and boldness in practice are the watchwords of the intelligent physician and surgeon, and generally lead to success. The axiom of Napoleon, that providence was on the side of the big guns, denuded of its sacrilege, is eminently applicable in the treatment of all diseases which require interference, and the doses of medicine or the extent of cutting should be proportioned to the gravity of the evil to be remedied. Risk of killing a patient by medicine or with the knife is sometimes warrantable, rather than leave him to a certain fatal end by disease; and the physician or surgeon who fails to afford the only relief that is practicable, through apprehension of the judgment of bystanders, is justly chargeable with neglect of duty. Let us suppose that we have a case of intussusception that is clear and well defined, which has resisted all the medication possible, with the certainty of a fatal termination if not speedily relieved, and what is indicated in view of the advances made in our resources at the present day? It is beyond a question that the abdomen should be opened, and the site of the occlusion being ascertained, an attempt should be made to withdraw the part of the intestine that is confined by the exterior portion; and this being impracticable, from adhesion or from the closeness of the stricture, excision of the segment should be resorted to, and the free ends united by silver wire sutures in the margins. Death may ensue, notwithstanding this is done with every possible precaution; yet death must certainly occur without it, and we should give the patient this chance of escape. The fatal procrastination in deferring this procedure until such vital depression has resulted as to preclude restoration, is certainly culpable; and hence in this, as in strangulated hernia, delay is always a dangerous practice. To perform an operation upon a moribund subject can rarely ever be justifiable: but when, by a timely resort to the knife, we choose the less of two evils, it is commendable to literally cut the Gordian knot.

This principle holds good in all branches of practice; and we thus endorse the sentiment that the "bravest are the tenderest;" for it is a true regard for the welfare of the sufferer which actuates the operator in such a case.

In critical conditions critical remedies should be resorted to, both by the physician and by the surgeon; and no half-way measure of compromise is suited to the circumstances of gravity which are threatening the life of the patient.

Should it appear that the heroic interference which characterizes the practice of some of the medical profession in this progressive age is rashness, I venture the assertion that before the close of the nineteenth century the daring intrepidity inspired by further investigation will have so far outstripped anything yet accom-

plished, as to cause the advances of to-day to appear tame, from over caution in executing what is imperatively demanded in emergencies; and cautious boldness must triumph over disease.

The lesson to be learned from this desultory consideration of the present status of practice in the medical, surgical, gynecological and obstetric departments, is that of encouragement in ascertaining the capacities of the human organization to admit of the requisite explanations of its disorders, and to submit to the curative processes which are indicated for their correction. The extravagances of novel measures of treatment will ere long disappear, under the crucial test of experiment; and careful investigation should confirm the tentative expedients which have been dictated by a proper appreciation of surrounding circumstances. Statistics must furnish the mirror in which the profession shall discover the defects of erroneous theory and injudicious practice, so that with elaborate reports of cases treated, we have a sure guarantee against vicious proceedings for the future. With the initiation so conspicuous in the recent developments of thought and action, it devolves more than ever upon observers to record the results which are presented, and especially is it incumbent upon those entering new fields of inquiry to note minutely all the data of the preliminary condition, progress, termination and consequences of the disorder. The antecedent and subsequent state of a patient are important elements in the study of a disease, and of still greater moment in the history of a surgical operation. If these off-hand comments upon passing events seem to attract the attention of the profession to the necessity of due circum spection in all things, the end in view will have been attained.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY ALONZO CLARK, M.D.,
Professor of Pathology and Practice of Medicine.

Bright's Disease.

First patient, a male, about fifty years of age. He states that he has been confined to the house about four months; that he has to stagger from one place to another across the floor, but that he is better now. The feet are swollen; much less, however, than they were previously. He prefers to lie on the left side at night, which may account for the fact that the left leg is swollen more than the right. The leg pits deeply. He also complains of having pain in the back. This symptom, with the weakness in the limbs which he complains of on walking, would suggest spinal disease. I have known persons with the legs considerably swollen. They could walk well enough, but when they got on the bed they could not lift their legs up. This patient says such has been his case also. That, probably, is the explanation of his awkward movement, especially as he has had no paralysis anywhere else. It is true he thinks the sensation in his legs is considerably diminished, but when I pinch him he grumbles.

Then the question is, what is the cause of the swelling of his legs? That is the most marked feature of his case. The answer naturally is, kidney disease; but Dr. Wheelock informed me that he examined the urine and did not discover albumen. That may be; for persons sometimes come to me saying they have Bright's disease, been so called by their family physician, and I examine the water and find no albumen. I do not conclude that they have not Bright's disease, but continue to examine it every second or third day for three or four weeks, because I know the microscopic, the chemical and the clinical symptoms are often absent for two or three weeks in a case that is really confirmed, and then will come again. The fact, therefore, that no albumen has been found in the water is by no means conclusive, especially when we have the evidence of the œdema. The œdema has been confined mostly to the legs and feet: he says he has not had any swelling of the hands.

There is an early sign of coming œdema that is, however, fallacious as a distinctive sign. I refer to the tear line. A little œdema will come on the conjunctival membrane of the lower lid, and pressing the lid against the eye, will force it up on to the top of the lid, and it will then have a little wire appearance, or the appearance of a small thread running along the lower eyelid. This patient has that. There is a little œdema of the conjunctiva elsewhere also. It goes away when you lift the lid, but comes again immediately after. He says there has been no enlargement of the abdomen.

He has had trouble in going up stairs during the last week or two, but it seems to have been due principally to the condition of his legs. He says he does not get out of breath except on some exertion.

We will examine his chest and abdomen. The fact that he prefers to lie on the left side is rather evidence against cardiac disease. Persons who have much of that trouble are very apt to lie upon the right side or back. I do not get any signs of valvular lesion about the heart, although there is a little hypertrophy of that organ. There is no pain in the chest. There is dullness behind, over the lower portion of the thoracic cavity, indicating a little fluid in either pleural cavity. There is, you will observe, some œdema of the face and swelling under the eyes.

I think this is an instance in which it is safe to infer that there is some trouble with the kidneys, and that, at the present time, conclusive evidences are not apparent, but perhaps a week hence it will be different.

With regard to the treatment in such a case, the great point is to keep himself warm. If he

is obliged to go out in cold weather, he should protect himself with an abundance of clothing. If he is not obliged to go out, it is better, in cold weather, to keep in the house. I have kept such patients in the house all winter, and directed them to keep the temperature of their part of the house at 72° F., night and day. Not so particular at night, because the bed clothes will protect them, but it is better to have it uniform. This man cannot do that; he will have to protect himself as much as he can in cold weather by clothing. A steam bath is a very excellent thing, to be taken twice a day, and anybody can arrange a home apparatus for that purpose. It may be prepared by taking a tin can that will hold a couple of gallons of water, covered with some utensil; put a tube in the dome of it; connect with this tube another one, six feet long, having an angle, which will convey the steam to the wooden chair on which the patient sits while covered with blankets, fastened about the neck. In a few minutes the patient will begin to perspire, and this may be kept up say twenty minutes or half an hour, when he should be well rubbed off, and if it be in the evening, as I generally direct, he should put on his night clothes and go to bed. If he sweats a little after that, all the better. Then in the morning before he gets out of bed, he should be rubbed thoroughly with a dry flannel so as to stimulate the circulation. That stimulation of the circulation of the skin with dry flannel or some agent that is equal to it should be practiced every day, whether he takes the bath or not the night before. I was in consultation near here some years ago, and it was agreed that to sweat the patient was desirable, and we were devising a plan by which it could be carried out when the nurse asked what was wanted. It being explained to her, she said she could do that. Boil a peck of potatoes; wrap them in a cloth and lay them close to the body. She did so, and it worked very well. It is often the case that bottles of water, not exactly hot but pretty nearly, are enveloped in damp cloths and laid alongside the body. The œdema will sometimes disappear on the use of these steam baths, but commonly it is necessary that some diuretic be used to accomplish that. All effusions that are observable in the body are easiest carried off by the kidneys, disturbing the system less than if carried off by any other emunctories that are capable of doing it.

For him, probably, as good a diuretic as any that can be prescribed is the sal diureticus, the acetate of potash, twenty grains every two hours, in water; and the infusion of digitalis, commonly a dessertspoonful, or two drachms, will be enough, taken three times a day. He cannot conveniently take it with the salt, because he takes that every two hours.

Facial Paralysis.

Case 2.—This man complains of a disfigurement of the face. He works by night and sleeps by day, and about two weeks ago, having gone to bed perfectly well, he awoke, and observed that the right side of the face was paralyzed. The right eye watered No pain was felt, but the face appeared disfigured.

This kind of deformity, paralysis, often comes of inflammation of the theca of the seventh nerve, the portio dura, and in that case leeches are the quickest remedy that we can use, applied as near to the source of the nerve as can be done; but in this case there is no tenderness at all. I press pretty hard, to the extent of a couple of pounds weight, and he says it does not hurt him any. This is not a very uncommon affection, and it generally comes just as in this man's case; it comes in the night, and I think it is more likely to occur if there is a draft of air upon the side of the face corresponding with the paralysis. Many of these cases will be relieved without any remedy in the course of four, five or six weeks. In others it is of very considerable duration; indeed, in some it is not relieved at all, being carried for years. Relief, when it is effected, is obtained from various sources; sometimes from electricity. Medicine, I think, has no power over it at all; at least I know of none. As just said, electricity seems to be remedial in certain instances. Dr. Detmold, some years ago, invented a little electrical apparatus which he thought would act well in these cases, and I think it does. It is a compound metal wire, containing two metals that act upon each other in a way to produce electricity. At one end is a hook which goes in the mouth, lifting the angle of the mouth up on the affected side, and at the other end is a hook that goes over the ear. He has the patient wear that continually, except while eating. It is a simple apparatus, and the saliva of the mouth probably aids in making it electrical.

You observe, as the patient smiles, how the face is drawn to the left side. There is no affection of the tongue that I can see. He can chew his food all right on either side. Sometimes the paralysis is so positive that the food will come out of the mouth when he chews with the teeth of the affected side, but it does not seem to do so in this man's case. I see some movement of the muscles of the paralyzed side, as he talks, which seems not to be entirely passive.

Spinal Sclerosis.

Case 3.—Our next patient is a man about thirty three years of age, who, as you see, has been led into the room by his wife. She says he has been sick about two years; has not been able to walk for about a year and a half. He has cramps; sometimes unconscious four or five hours after the attack. In the attacks the arms and legs are straightened and shake. The hands are clinched, and he attemps to get out of bed; talks, but appears to be unconscious. After the attack he asks what had been the matter, remembering nothing that had occurred.

Some of these symptoms point to epilepsy, while others do not. It is not uncommon that persons after an epileptic attack are really delirious, sometimes for half an hour, sometimes for four, five, or seven hours. She says he is white during the attack, which would not point to epilepsy.

Some days he cannot walk at all, and you will observe that muscular paralysis is plain enough. The next point arises, is there paralysis of sensation. Not being provided with a special instrument to test the sensation, we will take a card that will hold firmly pins stuck through it,

putting the pins two or three inches apart, to begin with, and reducing the distance gradually as we test his sensation.

You will observe that there is no defect in the sensation in his case. We would infer that there is here thickening of the posterior column of the spinal cord and not of the anterior. This is not a very uncommon form of sclerosis. He has not the walk of locomotor ataxia, but his wife's description of his walk formerly corresponds to the walk of that affection. We may infer, then, that he really had locomotor ataxia, and that it is now being converted into paralysis. We have such a patient in the hospital at present, who was treated in a variety of ways, by medicines given internally, until we finally settled down upon the fluid extract of ergot, increasing the dose until he got to taking a drachm three times a day. He continued that an entire year, at the end of which time he was so far restored that he could take the place of orderly about the wards. He has now been in the hospital five years, and some of the Professors show him to the students every year.

Now, as an encouragement in this case I should think the same medicine would give some relief to this man. Dry cups might also be applied over the spine, as it can be done by some one of the family, by burning a piece of paper in a small-sized tumbler, placing four on the back, two on either side of the spine. This, with the fluid extract of ergot three times a day, would be the treatment. I would not start out with a drachm of the medicine, but half a drachm, and see if he bears it fairly. This reminds me that we now have in the hospital a man suffering from dry gangrene of the toe. The pulse is good, and there is no obstruction in the arteries. We learned, after he had been in the hospital a day or two, that he had been eating rye bread; that for years he had eaten it whenever he could get it, and living in the west he could generally get it easily enough. The question presented itself before us whether this dry gangrene was the result of ergot which he got in the rye. In times past, when rye was used a great deal, dry gangrene occurred which was attributed to the rye, not, perhaps, to ergot which it contained, for that was little known until about the time of Dr. Stearns. But I am not sure about the agency of rye bread in this case of dry gangrene of the toe.

Graves' Disease.

Case 4.—Here is a case that you will be interested in. You will observe, first, that there is swelling in the neck. I have not seen her before, but the case struck me in an instant as she entered. Second, there is some degree of prominence, not remarkable, of the eyes. And third, I suppose we shall find the pulse beat at the rate of 120, perhaps beating more rapidly than under ordinary circumstances, coming into a room where there are so many strange faces. But I do not find any pulse beat at all, either at the wrist or elbow. The heart beat, however, is strong enough, and exactly at the rate of 120. The hands are warm enough; I do not know why the pulse cannot be felt.

She has, then, three elements of what is sometimes called Graves' disease, because he described it before anybody else, in the English language. It is claimed for Basedow in Germany, and for Trousseau in France, but Trousseau acknowledges that Graves described it before, so that it is not very wrong to call it Graves' disease. The thyroid gland is swollen, the right side more than the left, in this case. It is a mild case, showing the three characteristic features of it in a limited degree only. Congestion produces these swellings in the thyroid gland and behind the eye. How it should fall out that three parts of the body that are at a considerable distance from each other should undergo the same change, and the intermediate parts not be affected, is a matter difficult to explain. Still, case after case presents itself, though it is a rare affection, and we are obliged to assume that Graves was right in associating the three congestions (he did not explain it, however), and that it makes really one disease.

The patient says her general health is good; she eats well, digests well, has no pain. She does her housework and thinks she is as well as usual.

You ask what would I prescribe? That same fluid extract of ergot, because of its effect upon the capillaries. I would have her begin with twenty drops, increase it to thirty, forty, and perhaps, to fifty, in a week or ten days, and if it works as well as it has done in some of the cases I have seen, she will be improved in a moderate length of time. Speaking from my own experience, it always gets well; but I notice in the records of other persons it does not always. At any rate, there is hope for improvement in this case, as it is not a very well developed one. It has these three features, but none of them marked in a high degree.

Medical Societies.

THE RECENT EPIDEMIC OF MEASLES.

BY J. T. ESKRIDGE, M.D.,

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Read before the Northern Medical Society of Philadelphia, June 23d, 1882.

The severity of the recent epidemic of measles is of sufficient interest to occupy the Society's attention for a short time.

Case 1.—Charlie, aged ten years, moderately strong, suffered from scarlet fever and some of its sequelæ (otorrhœa and renal dropsy) three years ago, and from a moderately severe attack of pertussis attended by bronchitis, with some pulmonary collapse, during January and February of the present year. After this he was quite well until April 21st, when he complained of headache and sick stomach. His temperature at 2 P.M. was 101°; pulse 130 and vibratory; respirations 28 per minute. During the afternoon he felt chilly. His bowels were constipated. Eyes and air passages were in nearly normal condition.

22d. Morning temperature 98°; pulse 96; respirations 24. He did not feel sick, but his pulse was still irritable. Malaria was suspected and he was accordingly treated. I did not see

him the next day, but I learned that he had been feverish during the afternoon.

24th. Afternoon temperature 102°; pulse 130; respirations 30. The eyes were watery, conjunctivæ injected, nose discharging freely, throat sore and inflamed, and attended by a troublesome cough.

25th. Morning temperature 102.8°; pulse 135; respirations 36. Face quite red, with a scarlet-fever like rash. At 2 P.M., temperature 103°; pulse 140; respirations 40. The pulse was extremely irritable. His throat was very much inflamed and a papular eruption covered the buccal mucous membrane No false membrane formed on the tonsils or fauces, but the parts were of scarlet redness, and so painful that swallowing was difficult. A measley eruption covered the body and limbs. The heart's action was labored, and a systolic murmur was heard at the apex. During the afternoon and evening broncho-pneumonia began to develop, which resulted in partial consolidation of the bases of the lungs. Soon his breathing became rapid, and he irritable and restless. At times, when delirium was most marked, it was difficult to keep him in the recumbent posture. After the cardiac area and the surface over the involved portions of the lungs were dry-cupped and counter-irritated with mustard, the chest was kept wrapped in an emollient poultice, which was renewed every three or four hours. Carbonate of ammonia and small doses of aconite were given regularly at short intervals. He had taken no food during the last few days, and now could not be persuaded to take more nourishment than small quantities of milk to which a little brandy had been added.

26th. Morning temperature 102.5°: pulse 136; respirations 44. Urine scanty and high colored, but contained no albumen. No change during the afternoon.

27th. Morning temperature 102°; pulse 130; respirations 40. Slight improvement since yesterday. He continued in nearly the same condition during the following two or three days, when he began to gradually improve, his lung and heart troubles not entirely passing away until nearly three weeks later. After the chest troubles developed, the eruption on the skin became much darker, and was more tardy than it is usually in fading. The face contained no measley eruption, but the rash here presented the appearance found in a typical case of scarlet fever, with the exception that desquamation was not complete. At the height of the disease inflammation attended by suppuration of both middle ears manifested itself.

On June 13th, the left ear had regained its normal acuteness of hearing, but that of the right ear was still somewhat impaired. The eyes were the seat of acute phlyctenular conjunctivitis, but the corneæ and deeper structures were uninvolved. The urine remained free from albumen throughout the attack. During the first five or six days of his illness he ate very little. He is to-day, June 23d, quite well, except a recent attack of bronchitis.

CASE 2.—Mamie, a bright and vigorous girl, ten years old, enjoyed excellent health until her present illness. She was the third and last, in a family of three children, to contract measles. A sister, three years younger than herself, had, the early part of May, of the present year, a moderately severe attack, attended by considerable laryngitis and bronchitis. The recovery of this sister was rapid, uninterrupted, and complete. The youngest sister was attacked by measles one or two days before the eldest, and suffered quite severely from laryngeal, bronchial and conjunctival inflammation. The parenchymatous tissue of the lungs was but little involved. This one, too, made a good recovery after a rather tardy convalesence, the eruption being a little darker than usual, and remaining visible more than a week longer than we commonly find in this disease.

My attention was first called to Mamie's condition, May 17th, three days after she had first complained of feeling sick. Her eyes were watery and conjunctivæ injected; temperature 102°; pulse 130; respirations 32.

18th. Morning temperature 102.5°; pulse 134; respirations 36. The eyes were quite red, conjunctivæ ecchymotic, and nose discharging freely. A constant laryngeal cough annoyed her. An eruption was just beginning to appear on the face. Evening temperature 103°; pulse 136; respirations 36. Bleeding from the nose frequent during the last twenty-four hours.

19th. Morning temperature 102°; pulse 130; respirations 32. The face was completely covered by a measley eruption, which had almost entirely spread over the body. She was not troubled with cough, but was feeling well, although she had eaten nothing during the last four or five days. Nose bled freely several times during the night. Evening temperature 104.7°; pulse 148; respirations 64. The pulse was small and exceedingly irritable; breathing short and labored. A hacking cough, which the mother said began at 5 P.M., was now very troublesome. Her feet and hands were much cooler than the other portions of her body. Percussion resonance over the bases of the lungs, posteriorly, was slightly impaired, and numerous crepitant and subcrepitant râles were heard throughout the chest. Vesicular breathing was lessened in the lower but increased in the upper portions of the lungs. The heart was acting tumultuously, and the sounds were so indistinct that clotting in the right ventricle was feared.

The physical examination of the chest, when taken in connection with the temperature, pulse and respiration, showed that acute and violent congestion of the lungs and bronchial tubes had taken place. It was evident that unless the onward march of the disease was speedily checked acute œdema of the lungs, or capillary bronchitis, complicated by pneumonia, might terminate the little sufferer's life.

The chest was thoroughly dry-cupped, and sinapisms, followed by a poultice reaching from the second to the twelfth ribs, and encircling the entire chest, were applied. Half-drop doses of tincture of aconite root, in combination with the solution of acetate of ammonia and sweet spirits of nitre, were given every two hours, alternated by five-grain doses of carbonate of ammonia.

At 9 P. M. her temperature had fallen to 103°: at 11 P. M., but little change; same treatment continued for the night.

20th: At 6 A. M., temperature 103°; pulse 136; respirations 44. Not having slept much during the night, she felt tired and weak. The lower portion of each lung was partially consolidated, and in the upper there were heard exaggerated breathing and numerous crepitant and subcrepitant râles. During the night the eruption had become very much darker, many of the papules looking like dark blotches of extravasated blood. Digitalis was substituted for aconite. Throughout this and the following day she remained in nearly the same condition. At 9 P. M. of the 21st she was given, by mistake, about two ounces of brandy. This caused, for a short time, an increase in the frequency of the pulse and respirations, and gave rise to considerable cough, but the temperature fell about 2.5° within two hours from the time the overdose of brandy had been given.

22d. 8 A. M., temperature 99°; pulse 124; respirations 36. During the day the temperature rose to 102°; pulse to 132; respirations to 40. The pulmonary trouble soon began to lessen, although for nearly two weeks she took, in the way of nourishment, but little beside very small quantities of milk, to which a little brandy had been added. Her improvement, though slow, was continuous, and within eighteen days from the time of the first appearance of pneumonic infiltration only a slight portion of the base of the right lung remained involved, the left lung having almost entirely cleared up.

June 15th. She was looking and feeling well; only a little harshness in the respiratory murmur at the base of the right lung remained. A few days after the pulmonary complication began, the eruption all over the cutaneous surface was dark and hemorrhagic in appearance, presenting during convalescence, before the pigment of the blood was absorbed, the condition seen in so-called black measles. Traces of the eruption were visible nearly four weeks after the beginning of the disease. The urine was repeatedly examined during the attack, but no albumen was detected. So far, no sequelæ have developed.

Remarks —It is a well known fact that physicians in the country (in some parts of the United States, at least) are rarely called to see cases of measles, and that in the majority of instances, in many of the rural districts, when medical advice is sought, it is for some complications or sequelæ, the eruption having disappeared or is fast fading. I remember having seen, when living in the country, large families of children seized almost simultaneously with this eruptive fever, but I never knew a physician to be summoned for any of them.

It is believed by some that the exanthematous group of diseases is less severe in the country than in large cities. For over seven years, during which time I have been actively connected with one, and at times with two, of the largest dispensaries of the city, I had not met with cases of measles presenting very alarming symptoms, until the recent epidemic, which is now nearly over.

I have never lost a patient from the measles or its complications, but Dr. J. M. Keating, in an interesting and scientific paper on "Heart Clot in Measles," presented to the College of Physicians of Philadelphia, the first Wednesday of this month, reported four deaths from this disease, occurring during the spring and winter months of the present year, among the children under his care in the Blockley Hospital.

That some epidemics greatly increase the death rate from measles, may be gathered from extracts from Trousseau, Chadbourne and Raymond, quoted by Dr. V. P. Gibney in his communication on the "Sequelæ of Measles," to the New York *Medical Record* for June 3d, 1882. "Trousseau says, 'In an epidemic which I observed at the Neckar Hospital, in the years 1845 and 1846, out of twenty-four children who had measles, twenty-two died of peri-pneumonic catarrh; the other two escaped this terrible complication. This statistical fact enables you to estimate the frightful severity of this affection . . . . and the physician who considers measles a mild disease till he encounters one of these epidemics will afterward modify that opinion.'

"Dr. Chadbourne, in the *American Journal of Obstetrics and Diseases of Women and Children* for October, 1880, reports an epidemic of measles which prevailed in the New York Foundling Asylum in the spring of that year. There were forty-eight deaths in three hundred cases, twenty children dying of capillary bronchitis, broncho-pneumonia and œdema pulmonum. Twenty died from convulsions."

"Dr. Raymond, of Brooklyn, presented last year a report based upon the returns to the Brooklyn Board of Health, headed 'Measles Not a Trivial Disease.' Even in the limited number of cases of measles reported to the Board of Health of that city, in one year there were fifty-nine deaths from complications. Of lesions pertaining to the nervous system, six died of meningitis and hydrocephalus, thirteen of convulsions, and two of congestion of the brain. Respecting the pulmonary system, three died of congestion of the lungs, one of pulmonary apoplexy, eighteen of pneumonia, and five of laryngitis. Two died of dysentery."

During the recent epidemic of measles, the severity of the disease has been in a direct ratio to the age of the patient. This has been the rule in most cases I have seen, and if the mortality of this exanthema in camp life is due as much to age as to exposure, military statistics would still further substantiate this view. In the late War of the Rebellion, according to Bartholow, one-fifth of all the soldiers who suffered from measles died, their death being due directly or indirectly to this disease.*

Heart Complications.—All authorities are agreed that laryngeal and broncho-pulmonary troubles are the most frequent complications of measles, but endocarditis associated with this disease receives only a passing notice by the most systematic writers on the diseases of the heart. I have hurriedly looked through the works of Flint, Walshe, Da Costa, Latham, Fothergill, Stokes, Hayden, Markham, and Sibson's article on endocarditis, in Reynolds' System of Medicine, but have failed to find a single case of inflammation of the lining membrane of the heart

* Sanitary Memoirs of the War. (Quoted from Flint)

described or referred to in connection with measles. Some of these authors give measles as a cause of endocarditis. Was the heart murmur in Case 1. in this paper, due to endocarditis, or to an altered condition of the blood? The condition of the blood was apparently sufficient to give rise to a murmur, and if the diagnosis of heart trouble had been based upon the abnormal sound heard at the apex of the heart, the subject would scarcely be worthy of consideration. Certain symptoms pointed toward organic heart disease: First, the pulse was very rapid and irritable before the temperature began to rise, and the murmur was preceded, a day or two, by a prolongation of the first sound of the heart; secondly, the murmur was preceded and attended by pain and a sense of oppression over the præcordium, which was relieved by dry cups, sinapisms and poultices; thirdly, the cardiac irritability, as indicated by the pulse, extended well into convalescence.

Laryngeal Complications.—Another point of interest in the recent epidemic of measles was the tendency to diphtheritic inflammation of the larynx. This complication was not well marked in the cases coming under my care, only intense redness of the fauces, attended by great pain in swallowing, being found; but Dr. Keating, in his recent communication to the College of Physicians of this city, reported quite a number of cases of membranous laryngitis complicating measles.

Pulse.—Although many of my cases were doing apparently well, the irritable and frequent pulse invariably manifested at the height of the febrile action made me more or less apprehensive lest something untoward should occur. I have not seen a case of measles during the last four or five months that did not have a pulse frequency, at some stage of the disease, of 120 per minute, and in some cases this was increased to 130 or 140.

Sudden Changes.—The recent epidemic has been marked by sudden and unfavorable changes in the course of the disease. This fact is illustrated by the clinical history of Case 2 of this paper. In this instance a change was unsuspected, for at my morning visit everything, so far as I was able to judge, was doing well, yet in the evening the symptoms, for a time, were so grave that the patient's life was threatened. Several physicians have told me that they have of late met similar cases.

The prevalence, during the last four or five months, of a catarrhal fever, and the altered condition of the blood found in severe cases of measles, were probably the chief causes of these sudden changes.

Prof. DaCosta, on the first Wednesday of last month, presented to the College of Physicians of Philadelphia a concise paper on "Catarrhal Fever," observed during its recent manifestations, briefly detailing the history of a number of cases. In this fever the air passages bore the brunt of the disease, and sudden and alarming symptoms were not uncommon, although death rarely occurred unless the fever was complicated. It is probable that the frequency of typhoid pneumonia, and pneumonia occurring in connection with typhoid fever, during the past winter and spring, may be accounted for by the presence of this semi-epidemic fever. The weather of the present year has favored the development of catarrhal troubles.

To the condition of the blood in measles, until recently, attention had not been directed. The credit of the initial investigations of the blood condition in this eruptive fever is due to Dr. J. M. Keating, of Philadelphia.* He investigated and caused to be investigated the condition of the blood in a number of cases. In the mild cases no perceptible blood alteration was observed; in the cases that were more than usually severe, yet did not present very unfavorable symptoms, the white blood corpuscles, increased in number, contained micrococci in varying numbers; in the severest, and not infrequently the fatal, cases, the white blood corpuscles were increased in number, many of them disorganized, and these blood constituents and the liquor sanguinis swarmed with myriads of micrococci. In all his fatal cases (four in number) death was attributed to heart clot. An objective $\frac{1}{16}$ of an inch was used in these investigations.

If the condition of the blood was, as found in these cases, present in all the worst cases of the recent epidemic, the frequent, irritable and vibratory pulse, and the tendency to heart complication in a number of cases, are easy of explanation.

According to my experience, the recent epidemic of measles, in comparison with its severity, has been remarkably free from cerebral trouble. A few deaths from convulsions and coma have been reported, but the proportion has been small.

Diarrhœa has been present in quite a number of cases, but it has rarely been sufficiently persistent or severe to require special attention.

Treatment.—The common-sense management and general treatment will not be mentioned. In the treatment of some of Dr. Keating's cases, alcohol alone was relied upon for the relief of the alarming symptoms of dyspnœa and flickering pulse, associated with severe pulmonary complication, or with the formation of heart clot. Brandy was given in two-drachm doses, every hour or two, to a child a few years old. This was suggested by Dr. Formad, in consultation, because the latter's cultivated micrococci were readily killed by alcohol.† My cases, when grave pulmonary symptoms showed themselves, were mainly treated, externally, by dry cups, sinapisms, and poultices; and internally, by carbonate of ammonia, digitalis and alcohol. When the body temperature was considerably elevated and the skin dry, small doses of aconite instead of digitalis were given at short intervals. In case numbered two, decided improvement was manifest after two ounces instead of two drachms of brandy were given by mistake. In this case alcohol was not well borne during convalescence, it seeming to increase the evening rise of temperature, while resolution was going on in the lungs.

Remarks upon Dr. Eskridge's Paper.—Dr.

* Read before the College of Physicians.

† In answer to my inquiries, Dr. Formad writes me that "one or two drops of alcohol added to one drachm of his culture liquid stopped the growth and multiplication of the micrococci."

Samuel B. McDowell narrated the following interesting case: Miss —, aged eight years, complained of the ordinary prodromata, and was first seen on the second day of the eruption. The exanthem was well marked, but of a peculiar dark hue. Catarrhal phenomena were not a prominent feature. On the third day the eruption was decidedly purplish and strikingly resembled minute ecchymoses. Patient was in other respects not unusually ill. Was suddenly unable to void her urine, and tenesmus developing, I was summoned. After hot fomentations were applied, urine intimately mingled with blood was passed, and subsequently almost pure blood. The hæmaturia was so pronounced that, upon standing, a large coagulum formed. I neglected to mention that epistaxis preceded the appearance of the rash. No other complications occurred and the rash began to fade on the thirteenth day. Patient is now thoroughly convalescent.

Dr. James B. Walker has observed numerous cases of measles occurring among emigrants' children who were sent to Blockley. The eruption resembled that answering the description of the so-called German measles, and was characterized by efflorescence sharply defined, with interspaces of clear skin. Mild catarrhal symptoms prevailed, accompanied by enlargement of the cervical lymphatic glands. There was no uniformity of the size of individual papules and patches. The back is the region that should be inspected in exanthemata. In measles there are diagonal lines of patches running downward and outward from the spinal column. This I have seen so frequently that I regard it more pathognomonic of morbilli than the reputed crescentic arrangement. In Rötheln this form of the eruption has not been noticed. Regarding sequelæ, one child died of tubercular meningitis immediately after an attack of measles, but whether this had previously existed, or developed as a consequence, cannot be stated, as the parents spoke a foreign language, preventing ascertaining of anterior condition of child's health. Diarrhœa prevailed in all cases in the hospital during recent epidemic, and many fatal cases are attributed to this enervating complication.

Dr. L. Brewer Hall has heard a great deal about eye troubles following measles, but does not know of the truth of the belief. Many eye troubles that result from weakness follow this, as any other asthenic disease, but that they depend directly upon measles, he doubts, or at least is not in possession of reliable data. The debility preceding and following measles aggravates existing eye affections. One case of choroido-retinitis under observation, seems to be due to measles. The evils of a dark, illy ventilated apartment are certainly greater than the advantage, if any, gained by exclusion of light. In phlyctenules and conjunctival affections there is frequently increased congestion of lower quadrant of choroid, and even striation of retina, which, however, are not followed by serious consequences. The ear is frequently the seat of suppuration. The seat of trouble is in the middle ear. Perforation of membrana tympani should be treated promptly, with a view of healing. These troubles are amenable to ordinary treatment.

Dr. J. T. Eskridge noticed that epistaxis preceded the accession of severe symptoms in two cases. Diarrhœa in some of the cases was profuse, but not persistent. Regarding the use of aconite, I consider it very efficacious, even in fevers with considerable prostration, when administered in small and frequently repeated doses. It lowers arterial pressure, promotes perspiration, thereby relieving the harsh, dry skin, and contributes largely to the comfort of the sufferer.

For suppuration of middle ear cleanliness is a *sine qua non*.

Editorial Department.

Periscope.

The Effects of Certain Remedies on the Irritability of the Cerebrum.

Hitzig studied first the effect of remedies on the irritability of the cortical substance of the cerebrum. P. Albertoni, of Genna, has taken up this subject again and published his observations in the *Archiv. f. Experiment. Pathol. and Therap.* Bd. xv, Heft. 3 and 4, 1882. His experiments were twofold in character. He wished to determine, first, what changes of the irritability of the cortical substance of the cerebrum would take place under the influence of certain remedies, and to clear up at the same time certain questions concerning the treatment of epilepsy.

By experiments it has been clearly proven, that in dogs the electrization of the so-called irritable zone of the cortical substance of the brain produces an epileptic seizure. It is further known that of all forms of epilepsy the most common is that which is caused by a discharge beginning at the cortex of the cerebrum and spreading over the whole nervous system.

Albertoni's experiments were made on dogs and monkeys, with bromide of potassium, atropia and cinchonidia. The results were as follows:—

1. The continued administration of bromide of potassium diminishes in dogs, decidedly, the irritability of the cerebrum. If a brain, under the influence of the bromide, is irritated by an electrical current the effect is *nil* or hardly observable. One single large dose of the bromide will also reduce this irritability in a high degree.

If the administration of the bromide is continued for a long time in dogs, irritation of the irritable zone of the cortex of the cerebrum (especially of the irritable zones for the facialis

and the extremities) with even a far stronger current than that which, in a normal condition, will cause severe epileptic seizures, proves itself ineffectual, causing no response.

The conclusion may be considered correct, that a continued use of the bromide obtunds the irritability of the irritating point of the cortex of the cerebrum, as well as it prevents the spreading of the irritation.

2. Atropia, in not too large, but still poisonous doses, increases the irritability of the cerebrum, as proven by the greater irritability of the irritable zone of the cortex to an electrical current.

The differences in the irritability and in the development of the cerebrum explain satisfactorily the following interesting facts: (*a*) the diminished effect of atropia in children and young dogs; (*b*) the fact that the brain symptoms caused by atropia are far more intense in dogs than in sheep, the brain of which is more developed, but much less irritable; (*c*) the total want of effect of this drug in pigeons, the cerebrum of which is unirritable.

The possibility of inducing epileptic seizures in the larger mammalia by irritating with an electric current certain parts of the cortex of the cerebrum, is, by atropia, neither diminished nor removed.

3. Cinchonidia, in therapeutical doses, increases in epileptics the number of the seizures. As well as all other alkaloids of the Peruvian bark, cinchonidia is contra-indicated in epileptics.

If the cerebrum or the psycho-motoric centres are removed, cinchonidia will still cause epileptic attacks. This drug has an irritating effect on the central motor-ganglia.

The epileptic seizures which take place in dogs when under the influence of large and fatal doses of cinchonidia, are prevented in animals which have been kept for a long time under the continuous influence of bromide of potassium. At the same time, even the largest doses of cinchonidia lose, under such circumstances, their fatal effect. This proves that the bromides are indicated whenever epilepsy is caused by a condition of tension of the nervous centres.

The long-continued use of atropia prevents neither the epileptogenic nor the fatal effects of cinchonidia.

In epilepsy due to a condition of tension in the nervous centres, atropia is not only useless but hurtful. It may be administered, however, in fresh cases of epilepsy, caused by fright. In such cases, atropia should be given, up to poisonous doses.

In cases in whom the epilepsy is caused by congestion or obstruction of the blood vessels of the brain, atropia may be of benefit by producing contraction of the vessels, and preventing, in such a way, that hyperæmic state which induced the seizures. In cases of peripheral origin it may also be useful by obtunding the irritability of the peripheral ends of sensory and motor nerves.

Treatment of Infantile Gastro-Enteritis.

From observations made in the Children's Hospital at Pesth, Epstein concludes (*Prayer Medic. Wochens.*) that a liquid diet, poor in fatty matters, is the basis of treatment of gastro enteritis in young infants. He recommends particularly an albuminous lemonade, obtained by beating up the white of an egg with a pint of water, previously boiled, the resulting mixture being then carefully filtered. At the Pesth hospital this is prepared fresh three times daily, and is kept in a bottle well corked, and placed on ice. In a word, all precautions are taken to prevent the introduction of micro-organisms into the system.

Nursing from the breast should be completely stopped for the first few days. Every three hours, fifty grams of milk at a lukewarm temperature may be given to the child, either with the bottle or by spoonfuls. The child should not be put back to the breast until the loss of flesh, which is considerable at first, commences to diminish. Again, when at the commencement there is violent vomiting and rejection of yellowish curds, M. Epstein washes out the stomach daily, for from eight to fifteen days, by means of the œsophageal tube. As regards direct remedial measures, M. Epstein employs the following potion:

℞. Sodæ et magnes. benzoat., ℈ iv
Sp. vini gall., ʒ ss
Aquæ, ℥ vj. M.

Sig.—Teaspoonful every two hours.

When there is any tendency to collapse, recourse may be had to the following:—

℞. Tr. valerian, ʒ ss
Vini port (pur.),
Æther. sulph., āā ʒ ss. M.

Sig.—One or more drops of this mixture may be given in a spoonful of water.

When the child presents any sign of cerebral hyperæmia, with great agitation, chloral in small doses may be prescribed:—

℞. Choral. hydrat., grs. viij
Aquæ, ʒ xiij. M.

Sig.—A teaspoonful of this solution may be given every half hour while excitement continues.

Finally, when the inflammation has reached the large intestines, and symptoms of dysentery supervene, it may be attacked directly by the following enemata:—

℞. Ac. boracic., ʒ ss
Aquæ destill., ℥ iij. M.

or with—

℞. Argenti nitrat., gr. xij
Aquæ destill., ℥ ixss. M.

The results obtained from this course of treatment are, it appears, excellent.

Sick Headache.

Surgeon Major Roehring, of Amberg, reports, in No. 32 of the *Allg. Med. Centr. Zeit.*, April 22, 1882, a case of headache of long standing, which he cured by salicylate of sodium, which confirms the observation of Dr. Oehlschlager, of Danzig, who first contended that we possessed in salicylic acid one of the most reliable remedies for neuralgia. This cannot astonish us if we remember that the action of salicylic acid is, in more than one respect, and especially in its influ-

ence on the nervous centres, analogous to quinine.

While out with the troops on manœuvre, Dr. Roehring was called to visit the sixteen-year-old son of a poor peasant family, in a neighboring village. The boy, who gave all evidences of living under bad hygienic surroundings, but who had shown himself very diligent at school, had been suffering, from his sixth year, several days every week, from the most intense headache, which had not been relieved by any of the many remedies tried for this purpose. A careful examination did not reveal any organic lesion or any cause for the pain, which seemed to be neuralgic in character, a purely nervous headache. Roehring had just been reading the observations of Oehlschlager, and knowing, from the names of the physicians who had been already attending the poor boy, that all the common remedies for neuralgia had been given a fair trial, thought this a good opportunity to test the virtue of salicylate of sodium. He gave the boy, who, in consequence of the severity of the pain, was not able to leave his bed, ten grains of the remedy every three hours, and was surprised to see the patient the next day in his tent and with smiling face. The boy admitted that he for years had not been feeling so well as he did then. The remedy was continued, but in less frequent doses, for a few days longer; the headache did not return. Several months later Dr. Roehring wrote to the school teacher of the boy, and was informed that the latter had, during all this time, been totally free of his former pain, that he was much brighter than formerly, and evidently enjoying the best of health.

It may be worth while to give the remedy a more extensive trial, and the more so, as we are only too often at a loss what to do in stubborn cases of so-called nervous headache.

The Treatment of Fracture of the Skull with Depression.

On this important and interesting subject the *Lancet* makes the following remarks :—

It is not improbable that in the operative treatment of injuries and diseases of the skull, some of the most important advances in surgery in the immediate future will be made. We now operate freely on deformed bones and diseased joints ; operations on the abdominal viscera are now undertaken, which but a few years ago were looked upon as altogether beyond the bounds of the practicable; and the therapeutic advances that have made these procedures so successful may be equally well applied to the surgery of the head. But accuracy in diagnosis is an essential condition of successful treatment, and as the recent discoveries of the special function of individual portions of the surface of the brain are rendering exact diagnosis of superficial brain lesions possible, it is not rash to foretell that surgery will keep pace with the science of diagnosis. The surgical treatment of depressed fracture of the skull has been formulated into the proposition that when accompanied with evidence of compression of the brain, an operation to remove the depressed bone should be undertaken at once. This is the general if not the universal practice among British surgeons. But latterly, some inclination to extend the use of the trephine has shown itself in more than one quarter. The reasons for this extension are that the operation, when properly conducted, and especially when carried out with due precaution against septic infection of the wound, is not a very dangerous one, and if we may argue from Dr. Yeo's experiments on monkeys to man, we may say that the use of the trephine adds very little, if at all, to the gravity of a case. Again, surgeons from time to time see cases where the results of a post-mortem examination show that a life might have been saved by a timely use of the trephine. In Paris the doctrine was first promulgated that the trephine ought to be used in *all* cases of *compound* fracture of the vault of the skull, whether actual depressions of bone, or symptoms of compression, be present or not. And lately in America, it has been urged by Dr. Gunn that in *all* cases of depressed fracture, with or without symptoms of compression, and whether simple or compound, the depressed bone should be elevated. While we fully believe that the operation of trephining has fallen into undeserved disrepute, and might with advantage be resorted to more freely, we think that Dr. Gunn's proposal is unsound and dangerous. It is a familiar fact to any surgeon of large experience that patients who have received depressed fractures go through life quite unaffected by them, and while such is the case no appeal to cases in which the course of events is different ought to induce a surgeon to submit all cases alike to operation. For there is not conclusive evidence before us that the evil effects of depressed fractures, which often arise, may, without giving rise to symptoms, advance to such a degree as to render trephining useless. There appears, then, to be no sufficient ground for formulating the rule of practice otherwise than as at present, but it should be more liberally interpreted, close watch for symptoms of local mischief should be kept up, and the trephine resorted to as soon as any such symptoms declared themselves, even though slight, and with strong hopes of a successful issue, instead of, as at present, looking upon it as a *dernier ressort*, and using it timidly and with gloomy foreboding.

A Peculiar Idiosyncracy as to Mercury.

In the *Practitioner* Dr. Simeon Snell reports the following unusual case :—

Mrs. C., a widow, aged 41, by occupation a monthly nurse, was sent to me on October 26th, 1881, by her medical man. For some weeks she had perceived that her sight was getting defective, but especially the right eye had become worse quite recently. She had suffered from slight rheumatism at different times, and now attributes her complaint to "cold," but there seems good reason to suspect a specific taint.

In both eyes the vitreous humor was hazy, and floating films were noticed, especially in the right eye. The left pupil dilated well to atropine, but the right displayed a tag of adhesion at its lower part. R. V. $= \frac{20}{70}$; L. V. $= \frac{20}{50}$. The patient was hypermetropic ($\frac{1}{8}$), and the vision of the left eye was materially improved with the

appropriate glass. Iodide of potassium in 4 gr. doses, with cascarilla, was prescribed; and atropine drops were ordered to be instilled into the eyes.

October 29th.—She is to-day somewhat better.

November 8th.—In the right eye a more acute phase of iritis is noticed, and in the left the films in vitreous are more marked. A drachm of the liquor hydrarg. perchlor. was now added to each dose of the mixture.

In the course of the next few days I heard from her medical man that she was much worse; "he was at a loss to account for her symptoms;" and on the 12th he had stopped the mercurial He desired me now to admit her into the Infirmary. The patient has since told me that she commenced the fresh medicine (hydrarg.) on the 9th, and that after three doses of it she felt ill, and continued to get worse while she was taking it.

On November 18th she came to the Infirmary, but appeared so weak, and told me also "that the vomiting which commenced while taking the medicine" had only ceased for a few days, that it seemed desirable to place her on the medical side of the house, and she thus passed under the care of my colleague, Dr. Bartolomé. Under his treatment her general health rapidly improved. On December 20th, however, the perchloride was again ordered. The next day the temperature had risen to close upon 104°. There was vomiting, also, not merely after food or drink, but at other times; the tongue was furred, and complaint was made of pain in the head. On the discontinuance of the mercury and the substitution of a stomachic, the temperature fell, with a corresponding improvement in her general condition. Subsequent thermometric observations displayed a normal temperature, with occasionally a very little above.

As I have intimated, she recovered again, and on January 12th, 1882, was transferred to my care in much improved health. The pupils dilated well under atropine, but the edges were somewhat irregular, and the vitreous in both eyes was turbid. In addition to continuing the atropine, on January 15th a mixture of citrate of iron and quinine was prescribed, and a powder of 2 grains of hyd. c. creta was ordered to be taken twice daily. She probably had one of these powders the same evening, and there was a rise of temperature, with the vomiting and general disturbance as before. I believe she only had three, or at the most four powders. The fall of temperature after their discontinuance was marked; there was a subsequent rise, caused, I fancy, by a troublesome alveolar abscess.

Under small doses of potassium iodide she has since done well.

The foregoing case is of interest as exhibiting an unusual effect of mercury. It is not uncommon to meet with cases in which a small dose of the drug has produced salivation, but in the case under consideration there were no signs of ptyalism. Twice, however, it is seen that a rise in temperature occurred after the administration of the mercurial. No record is at hand of the temperature in the illness, after the use of the perchloride of mercury and iodide of potassium before admission to the infirmary. I apprehend, however, that there can be little doubt that it was similarly affected as in those instances more closely observed.

It should be added that the urine was normal.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

—"The Genius of Medicine," is the title of a very interesting address, delivered before the Florida State Medical Association by Dr. Robert B. S. Hargis, of Pensacola, Fla. It is really a short and very concise account or history of the progress of the science of medicine from the earliest days to the present time. While it does not take the place of more pretentious volumes on this interesting subject, it yet will serve to impress on the mind of the reader the dates of, and circumstances attending, the advent of the most important events in medical history. A short account is given of the introduction and progress of sanitation in our country. The author tells us that in the earlier part of the decade from 1860-70 the chief sanitary officer of the city of New York was a very ignorant politician, and its sanitary inspectors were keepers of grog-shops. One of them, when asked, "What is hygiene?" answered, "*a mist arising from the ground;*" while another stated that the best preventive of smallpox was to "burn coffee in the room." The author pays a high tribute to Dr. Stephen Smith, of New York, to whose unremitting exertions we owe the existence of the American Public Health Association. The essay comes to us in the form of a reprint from the July number of the New Orleans *Medical and Surgical Journal*, and we regret to say that numerous typographical errors and misplaced punctuation make it rather difficult to read.

——Dr. John MacKenzie, of Baltimore, has had his attention called to the frequent existence of ulceration of the trachea and bronchi in patients suffering from pulmonary phthisis. Desiring to determine whether there existed any relation of cause and effect between these two conditions, the opportunity was afforded him of making examinations of the respiratory organs of all patients dying of phthisis in the Rudolph and Jewish Hospitals of Vienna during a period of five months, and the result of these valuable observations he has incorporated into an address delivered before the Medical and Chirurgical Faculty of the State of Maryland, a reprint from the transactions of which we have received.

The author noted that these ulcerations, for the most part superficial, irregularly round or oval erosions of the mucous membrane, varying in size from a pin's head to a small pea, and tending to coalesce and form large ulcers, were most frequent in the lower portion of the trachea and bronchi. He has seen the trachea in its entire length and circumference, together with the bronchi on both sides, almost completely destroyed, and its mucous membrane converted into a gangrenous mass. These ulcers are never found in the bronchi of the unaffected lung. The Doctor concludes that his observations go to show that diphtheritic ulceration of the larynx, trachea and bronchi occurring in the course of pulmonary phthisis is related to the affection in the lung in so far as it is produced by the corrosive action of the sputa; but that in the present state of our knowledge it is impossible to affirm its specific tubercular nature.

——By degrees we are adding one disease after another to what might be termed the "Bacterian Class." Bacteria, bacilli, micrococci, etc., are terms heard on every side, and yet few, comparatively speaking, have any true conception of what the terms mean. Dr. Charles S. Dolley, of Rochester, New York, in a paper read before the Rochester Society of Natural Sciences, has furnished a very lucid and interesting account of the main points connected with bacteria. The term bacteria, while used comprehensively to designate the whole class of minute organisms under consideration, the author considers an error, since the *bacteria*, in truth, constitute one distinct species, viz: the short, rod-like organisms; then we have the round or oval, which are *sphero-bacteria* or *micrococci*.

Bacilli are those long, stiff, fibre-like bodies, while similar organisms, *yet flexible*, are known as *spirochæte*. Similar long bodies, when curled liked a corkscrew, are called *spirilla*, and when merely wavy or curl like, *vibrios*. Bacteria are very small, a cube the size of a pin's head would contain six hundred and thirty-three millions, and they increase with such rapidity that the progeny of one single germ would, in less than five days, fill all the seas of the world, as stated by Cohn. These bacteria are considered to be the means of conveying disease, in certain instances, because of the morbid material which they contain at the time, but are not in themselves the cause of disease. The greater proportion of bacteria are transparent and colorless. Speaking of Pasteur's researches into the bacteria of disease, Prof. Huxley has said that they fully balance the ransom of $1,000,000,000 paid by France to Germany after the war of 1870–71. This pamphlet is well worth the perusal of all those who have but a vague and indistinct notion of the nature of bacteria.

BOOK NOTICES.

Transactions of the Indiana State Medical Society, 1882. Indianapolis: 1882.

These Transactions make a neat and well printed volume, and the contents are worthy of preservation in book form. Besides the usual proceedings, necrology, etc., there are a number of original articles. The address of the President is an excellent summary of the advantages of sanitary legislation. Of the other papers we may mention one of interest on the health resorts west of the 100th meridian, by Dr. E. S. Elder; a discussion of the treatment of that formidable disease, epidemic cerebro-spinal meningitis, by Dr. R. F. Stone. His treatment is decidedly active and positive, and we should like to have had statistics as to its results. The management of still-born children after resuscitation is a very judicious paper, with many useful directions, by Dr. Wm. H. Bell. Other papers are published from Drs. A. G. Preston, J. R. Weist, Thad. M. Stevens, Mary M. Thomas, N. Field, H. V. Sweringen, J. W. Compton, etc.

The volume may be obtained of the Secretary, Dr. E. S. Elder, Indianapolis.

Atlas of Gynecology and Obstetrics. Edited by Dr. A. Martin. Folio. Published by A. S. Wilde & Co. Cincinnati.

This large and handsome publication is well worthy the attention of the general physician and those who pay special care to the diseases of women. It contains four hundred and seventy-five black and thirty-seven colored illustrations, selected from the works of a large number of eminent European writers. It also has a supplement embracing a number from the "Nouvelles Demonstrations d'Accouchements" of Prof. J. P. Maygrier.

An examination of a number of these plates show that they are accurately drawn and colored, and they cannot fail to be of great use, especially to those whose opportunities of refreshing their anatomical knowledge by dissection are limited.

The work is published only by subscription, and those desiring to purchase should address the publisher directly, who will forward full descriptive circulars.

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TARDY WISDOM.

The cable telegraph, one day a week or so ago, sent the following item of news flying over the western world:—

A CRITICISM.

LONDON, Aug. 11th.—The *Athenæum* says Prof. Esmarch, the eminent German surgeon, has published a lecture which he delivered before the Physiological Society at Kiel, on the treatment of General Garfield's wound. Prof. Esmarch's lecture was to the effect that General Garfield might have been alive but for the treatment he received.

We will suppose the above item is true. It probably is nearly so, as the *Athenæum* is a careful and well informed paper. We ask, is it possible for Prof. ESMARCH or anybody else to form a correct opinion about a confessedly obscure and intricate case without seeing it? Is it fair to pronounce criticisms adverse to the skill of surgeons, when these criticisms are based upon facts developed after the case had terminated, and which could not have been known before?

We have heard of a man who remarked to his censors that there are many cases where it is the most difficult of all things to exercise a judicious foresight; but that anybody can rely upon their *hindsight*. So we think that Prof. ESMARCH, or any other surgeon, with a full knowledge of the lesion in the late President's case, might suggest something which might have been done that was left undone; might object with reason to something done, which had better been left undone. But is not this the history of every unfortunate case? And is there any guarantee that if these steps had been taken the result would have been different? None whatever.

Consultations "by letter" are well known to be unsatisfactory. Some most acute diagnosticians decline to pronounce an opinion on any case where they do not have an opportunity to see the patient. Yet surgeons had, and still have, no hesitation about advising and criticizing this case of gunshot wound. Yet not one of them would be willing to treat a case by hearsay. This indicates a contradiction between their literary and their practical life which should not exist.

Guiteau said that the doctors had killed the President. But he could not find among the many who had shown themselves willing enough to intimate as much in newspapers, medical journals and private conversation, any one of standing who dared come forward and back his opinion on the witness stand. Either they were cowardly enough to let a man be hanged for an act he did not commit, or they had been saying what they knew they could not sustain under cross-examination.

Such expressions were unfair, because they had not sufficient grounds to rest upon. Every one, no matter how eminent, is open to candid criticism. But to claim that the result would have been different had the treatment been other than it was, or to blame the attending surgeons for ignorance of what they could not have known during life, is unjust.

POLICE SURGEONS.

Two recent occurrences, one in England, the other in our own charitable city, call loudly and in unmistakable terms for a well organized and well paid corps of police surgeons. In our city, a man was recently found lying on the street in

an unconscious condition; naturally supposing him to be drunk, for he knew nothing of medicine, and his very calling causes him to regard every one found under similar conditions as intoxicated, the police officer arrested this man and took him to the station-house. The lieutenant in charge, having no more knowledge of the various morbid and dangerous conditions that may nearly simulate alcoholic intoxication, confined this unfortunate to a cell. Shortly afterward he was found dead. Upon subsequent investigation, it was ascertained that this man was a person of respectability, of temperate and industrious habits. While walking on the street on a very hot day he had been overcome by the heat, and had perished from sunstroke when possibly intelligent professional treatment might have saved his life. A case very similar to this one has been reported as having recently occurred in London. We had occasion some time ago to note the case of a young girl in England, who, being among strangers, was supposed by all who saw her to be drunk, when in truth she was dying from acetonæmia, and did perish within a few hours. It is unnecessary to insult the intelligence of our readers by detailing the various conditions, such as uræmia, acetonæmia, narcotic poisoning, and the like, that are very apt to be mistaken for the stupor of alcohol by one not accustomed to meet with these conditions. Besides, we must bear in mind that alcoholism, alcoholic coma, is in itself a dangerous condition, capable in certain cases of extinguishing the spark of life, and therefore a condition that requires active medical interference. The profession is in a measure prepared to recognize dipsomania as a material disease, and all are agreed as to the dangerously poisonous effects of large doses of alcohol. Therefore, it is not always safe to leave a man in a drunken stupor to "*sleep it off*" and "*come to of himself.*" To remedy this void in our civilization and philanthropy it will be necessary for our city fathers to make an appropriation for and to organize an efficient corps of police surgeons, whose duty it shall be, each in his respective district, to respond as promptly as possible to all calls made upon him from the station-house to which he has been assigned. Further, it should be made the imperative duty of each police lieutenant to immediately summon the district physician to every prisoner who may be brought into the station-house in an unconscious condition, as well as to all who may complain of being unwell. The cost to the city would be comparatively small (even though thoroughly competent physicians were procured by the payment of liberal annual salaries) when viewed alongside of the enormous wastes and steals of the public money. From a humanitarian standpoint, it would be better to have the physician summoned unnecessarily a hundred, yes a thousand times, than that one worthy citizen should perish like a dog, as in the case just quoted.

Notes and Comments.

A New Way to Detect Stone in the Bladder.

Dr. James McKenzie Davidson, in the *Lancet*, calls attention to the "auditory method" of detecting vesical calculi. This simple method consists in connecting the end of the catheter with the ear of the surgeon by means of an india rubber tube. A light rubber tube two feet long and with a bore three-eighths of an inch in diameter was employed. One end was slipped over the handle of the sound and the other end held close to the ear. No difficulty was experienced in exploring the bladder, because the tube was so flexible, and it only required a little care to prevent the interference of extraneous noises, as rubbing against the coat, etc. A small calculus was introduced into the bladder (for experiment) and when nothing could be heard or felt by the sound alone, yet by means of the tube the calculus was distinctly and unmistakably heard. With a large stone the click was greatly intensified when heard through the tube. A small piece of coal was crushed to rough powder and introduced into the bladder. The ordinary method revealed nothing, but through the tube a rough, grating sound was distinctly heard.

This method of exploration of the bladder may yield important practical results. Not only may (1) a small calculus be detected which would be otherwise overlooked, but (2) it may be that practice will enable the operator to distinguish the size and character of the surface of a calculus readily; and (3) it also appears likely that a

somewhat similar ear connection with a lithotrite will enable the operator to find and secure small fragments more readily, and so crush them.

Compound Fracture of Both Arms.

Mr. E. Downes reports, in the *Lancet*, the following case which occurred in the Kashmir Mission Hospital: A boy, about fourteen years old, met with an accident by which both bones of both arms had been broken one and a half or two inches above the wrist. After receiving the injury he walked twenty miles and received no treatment for ten days. Upon entering the hospital the wounds on both arms were dirty and stinking. There were two wounds, one for each bone, and the right hand was swollen, and pus could be pressed up into the wound from the palm. The large blood vessels appeared uninjured. After the wounds had been cleansed the ends of the bones were sawn off and the limbs were put in bracketed splints, dressing the wounds with lint and carbolic oil. For two weeks the boy lived in great agony, opiates failing utterly to relieve his suffering. Finally improvement came; the discharge became more healthy, the hands looked more natural, pain diminished and appetite improved. After six weeks union was noted. From time to time it became necessary to slit up sinuses into which pus had burrowed. He was discharged after two months and a half; at this time the fingers of the right hand were not of much use and the left hand was somewhat stiff; he could, however, flex the hand and fingers; he could even hold a stick with his left hand, though the grasp was not firm. This case serves to show what can be accomplished by conservative surgery.

The Long Continued Use of Lime Water with Milk

At a recent meeting of the Medical Society of the County of Albany (*Med. Annals*), Dr. X. T. Bates presented a paper on this subject, in which he suggested that the long continued use of lime water and milk may result in the formation of a cement of casein and lime, which will prove a mechanical obstacle to the function of the bowel. Two cases were reported, both of typhoid fever, where milk and lime water was used. In both cases the patients (when convalescent) were taken with severe pain in the abdomen; the first case died unrelieved after ten days. In the second case the rectum was found filled with dry, stony-hard fæces, when broken presenting a gray, glistening appearance resembling cement. These were removed mechanically every day, the paroxysms recurring for eight days, when they ceased and the patient recovered. The discussion was unfavorable to Dr. Bates' theory, which was considered untenable. There is so little lime in lime water that the quantity taken to produce mechanical troubles by its presence would have to be enormous. Milk, alone, will prove very constipating to some persons, and will produce just such hard, glistening, grayish fecal masses as described by Dr. Bates, and they will have to be removed mechanically, causing the patient the most excruciating pain.

Sciatica Cured by Nerve Stretching.

Dr. Truman reports in the *Lancet* the case of a woman whose occupation had required her to sit for many hours daily on a hard wooden stool. In the summer of 1879 she commenced to feel pain down the right leg, which continued, though not very severe, until July, 1880, when it became intense, and since that time she has suffered daily. For two years every known internal remedy and external application has been used in various hospitals, with hardly any relief. On October 21st, 1881, an incision was made at right angles to the course of the great sciatic nerve, through the skin and superficial fascia, the lower edge of the gluteus maximus found and followed to the tuber ischii. The finger was passed deeply down by the outer side of the long head of the biceps, and the nerve identified and drawn to the surface. Two or three steady and vigorous pulls were given in both an upward and downward direction (toward the pelvis and foot, respectively.) The nerve was then allowed to sink. There was no hemorrhage requiring a ligature. A horse-hair drain was placed in the wound, the edges of which were brought together with silver wire sutures and the whole dressed antiseptically. For several days she had very high temperature, which was successfully combated with quinine.

November 16th she was discharged, and up to the present time has had no pain whatever.

Pilocarpia in Diphtheria.

Drs. Archambault and Pousson (*L'Un. Méd.* No. 20–25, 1882) have made a number of observations with the citrate of pilocarpia in diphtheria. They had opportunity of noting its effect in seventeen cases, and have come to the conclusion that instead of doing any good, pilocarpia is undoubtedly *harmful* in diphtheria. None of the cases improved under it, nine died. Seven cases died after the first hypodermic in-

jection. The more the child seemed susceptible to the action of the pilocarpia the more rapidly the case became worse. This confirms the view of other observers.

Willow Leaves in Ague.

The *Lancet* says that an Indian surgeon, Chetan Shah by name, has recently revived the use of willow leaves in intermittent fever. This is an old remedy, now almost forgotten in Europe, while the leaves of several species of willow are still largely prescribed by hakims of India and Afghanistan, especially in the form of a distillate. Among the lower classes of Cabul, and especially in women, quinine was found to irritate the bowels, while the juice of the fresh willow leaves, largely diluted with water, rarely failed to cure intermittent fever, and never caused irritation. In pregnant women the willow leaf is almost always found preferable to quinine.

Glycosuria in Cases of Poisoning by Carbonic Oxide.

In two cases of severe and almost fatal poisoning by carbonic oxide, Dr. O. Kahler (*Prager Med. Wochenschr.*, 1832, No. 48–49,) detected in the urine which was passed during the first twenty-four hours after the poisoning a decided quantity of sugar. In the one case, a servant girl, thirty years old, 0.9 per cent. was found in 1200 ctm. urine, and a still larger quantity was detected in the second case. After cessation of the sugar in the first case, traces of albumen were found in the urine.

The cause of this presence of sugar is believed to be the action of the carbonic oxide on the prolonged spinal cord, similar to the puncture of the floor of the fourth ventricle; but Kahler supposes that the disturbance in respiration may produce it. The fact is undoubtedly of some value for diagnostic purposes.

Special Reports.

NO. XI.—SURGICAL INSTRUMENTS.

The theory of the production and treatment of fractures of the patella are subjects upon which, of late years, every surgeon seems to have felt it incumbent upon himself to particularly study, discuss, and suggest new reasons and new modes of procedure for relief, hence proving two things; first, the great importance of the subject; secondly, the fact that we have not definitely settled and determined without exception the proper course to be pursued in dealing with this bone of contention. It is evident that the primary indication to be met is the holding of the fragments in such position as to get the closest possible union of the fragments, but how to accomplish this desirable result with the least possible chance of failure or the production of worse mischief has been the mooted question. As to how fracture of the patella is produced, it seems to be the common supposition that when a person falls, striking directly or obliquely upon the knees, a fracture occurring under such circumstances is the direct result of the violence of impaction. Theoretically, this seems very logical, but if we pause for a moment to study the mechanics involved, the point at which fracture of this bone usually takes place, and the nature of the fracture, we are constrained to considerably modify our views. The commonest location of the seat of fracture of the patella is in a transverse line across the bone, in the immediate neighborhood of the tendon of insertion of the quadriceps extensor femoris. There are two other forms of patella fracture, however, which are much rarer than the one first mentioned, these being, in the order of frequency, the comminuted fracture, in which the bone is splintered into more than two pieces, and the vertical form of fracture, in which the separation is in the direction of the long axis of the bone, two vertical halves being created; these latter two are generally of more serious import than the transverse, from the fact that to produce them requires that a very great degree of violence is necessary, which violence generally does not exhaust itself upon the patella only, but upon the knee-joint also, laying it open, and thus greatly complicating the case. As a rule, fracture of the patella is the result of a sudden tension or spasmodic contraction of that great tendon of the leg which inserts upon the upper half of this bone, its lower half giving attachment to the tendon (commonly regarded as a continuation of the quadriceps) which runs down to be inserted upon the tibia. Now from the location of the patella it is in a very favorable position for the easy production of a fracture in the case of a violent fall, the condyles of the femur affording a fulcrum over which tremendous leverage may be exercised.

In falling forward, especially where one trips unexpectedly, there are generally made a number of violent efforts to regain an equipoise; in this attempt the muscles on the front of the thigh play an important part; the instinct of the individual makes him make violent effort to extend the leg, the body being unconsciously suddenly retroflexed; thus a decided contractile effort is made by the extensor quadriceps, there being a

direct ratio between the contractile efforts of the muscle and the attempt made by the individual to save himself; thus the upper part of the patella is violently dragged upward; in the meantime, the flexors of the leg have, in falling, a balance of power which did not before belong to them, they are acting to the very best possible advan tage; this being so, their force is propagated along the tibial attachment of the tendo-patellæ, tending to drag down the lower half of that bone, while posteriorly the bony structures back of the patella not permitting the bone to be forced backward, as it normally would be, as the resultant of these two forces, acts as the fulcrum over which it is broken, so that it is probable that in cases of fracture of the patella, the damage is done before the bone has come in contact with the ground; when a person falls backward, the same mechanical principles will apply; the body being thrown violently back, extreme extension is made upon the quadriceps; the fulcrum is the same; the patient, in his efforts to recover himself, unconsciously, almost, flexes the leg on the thigh, uses the ball of the foot and the toes as a steadying point or fulcrum, and will generally, before he falls, make a violent effort of flexion of the leg, accompanied by a spasmodic forward and downward thrust of the femur; thus we have two fulcrums acting, the metatarsal phalangeal articulations below, and the articular expansion of the femur above, at the point at which the patella is situated; the powers are represented by the quadriceps extensor and by the muscles of flexion; the resistance to be overcome is simply the cohesive and adhesive forces in the particles of the patella. If any one will himself go carefully through the experiment of falling forward and backward, he will, I think, find that what is here set forth actually takes place; that there is violent extension, plus a counter effort of flexion, and in falling backward, at the end of the fall are abduction and rotation outward of the foot and lower part of the leg, thus giving a twisting, screwing motion to the tendon between the patella and the tibia.

Of course, these remarks will not apply in those cases where fracture is the result of direct violence, as in the case of a direct blow which splinters or comminutes the bone, or a knife thrust, which divides it into two lateral fragments. Experiment has shown, however, that the patella will stand an extraordinary amount of direct violence without fracturing, this, no doubt, being partly due to the slipping motion which this bone has when struck, thus enabling it to glance out of harm's way. We think we may say there is a universal belief in the fact that muscular violence is the principal factor in the production of this lesion when fracture is the result of a fall. The existence of fracture having been once established, the first question to arise is that of treatment, and this has been the stumbling block of the profession. The great trouble has been, it seems to us, that in many cases too much has been attempted too soon. This has been especially the case when hooks of various kinds have been employed in the treatment of this fracture; in no place is the beauty of the advice, "learn to wait," better exemplified than here. Under no circumstances is it advisable to employ hooks until the entire subsidence of the first inflammatory action, and the disappearance of the swelling which takes place immediately after the receipt of the injury. If hooks are introduced during this period the most lamentable results may be precipitated, not the least of which is erysipelas. The law is that the hooks should not be introduced before a week or ten days have elapsed from the time of injury, and not even then if any irritation whatever remains at the seat of injury. The Malgaigne hook has been for a number of years employed by many surgeons in the treatment of this fracture, and while some have praised others have reviled it.

With the construction of the Malgaigne hooks every surgeon is familiar, the apparatus consisting, as it does, of four hooks, in pairs, each pair being arranged on a sliding frame. While they answer the purpose of holding the fragments of a fractured patella together, they present the disadvantage, which is at times very great, of being applicable only in certain limited positions; while one hook or the hooks on one side may be readily and properly fastened, the others must take their chances of securing a proper position. Further, they are made to work together on immovable straight lines, while, primarily, the fact exists, that the bone over which they are placed not only presents no straight surfaces, but is decidedly asymmetrical; the result is that it is not always possible to hold properly in position, by Malgaigne's hooks, the fragments of a fractured patella after they are brought into position. Taking all the above facts into consideration, it is evident that more or less modification of the hooks was very desirable, for while in many respects the principle upon which they were founded was admirable, yet in construction they lacked some of the needful qualifications to adapt them to the work they were intended to do. A number of gentlemen in the profession have made more

or less modifications of the hooks, the most recent having been made by Dr. R. J. Levis, of this city. Levis' modification consists, first, in separating the hooks into two pairs, each of which pairs is again separated, in a manner which we shall describe later. Further, the *ends* of the hooks in this improvement are made decidedly longer, more delicate, and *sharper* (more pointed) than in the original apparatus, this improvement permitting of more easy introduction, as well as affording a deeper and consequently better hold upon whatever structures they may happen to come in contact with; there is, besides, less irritation produced by the presence of these long, comparatively finely-pointed hooks, than by the shorter and more blunt hooks of the original. We shall consider one pair of hooks only, the instrument being symmetrical on the two sides. A flat bar of steel, two inches in length and half an inch in the transverse diameter, from which a section is cut extending from the stationary screw socket or head to the end of the bar, thus leaving two lateral tongues upon which the movable hook of the apparatus travels; this arrangement is shown in figure *D*. The permanent

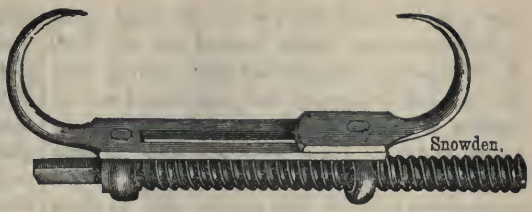
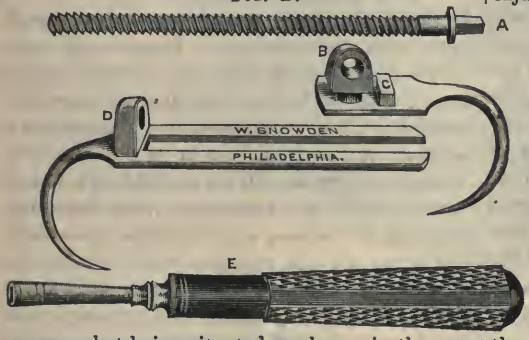


FIG. D.



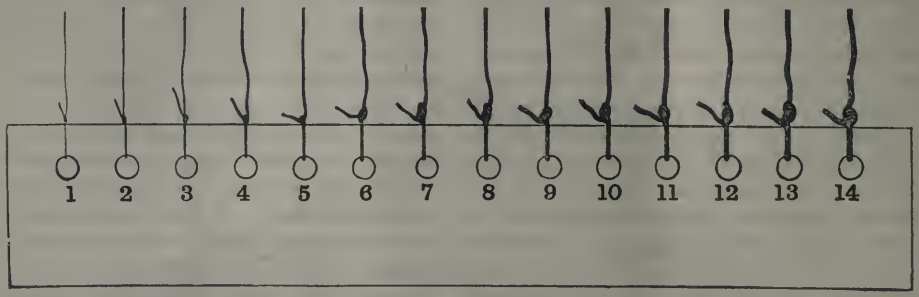
screw socket being situated as shown in the cut, just where the hook begins to spring from the body of the instrument, a screw, *A*, which can be tightened or loosened at pleasure by a key, *E*, plays through this screw bed as well as through the eye, *B*. The nut or elevation, *C*, fits into the tongued portion of the apparatus and prevents all wabbling; while *B*, acting on a pivot, permits the points to be introduced at any distance apart before it is turned into its transverse position and securely fixed by being held by the screw, *A*.

In the accompanying figure the appearance of the apparatus is shown when fixed in position. The result of the arrangement of the hooks in pairs is that they accommodate themselves to any position of the fragments, the movable part being introduced last. Again, by thus dividing Malgaigne's hooks into two lateral halves, the pairs may be separately removed and replaced as desired, which is, of course, a desideratum. There has been, we admit, a great deal of objection in many quarters to the employment of hooks of any description in the treatment of patella fractures; but we must pause and ask if many of the failures and unfortunate contretemps reported have not been largely due to the inexperience or haste of those employing them; in this, as in everything else, there is a law which must be rigidly and unvaryingly adhered to, and this law is altogether in regard to the time of application of the hooks; we repeat, that under no circumstances should the hooks be placed in position before any effusion that has taken place has disappeared, and all swelling subsided, the cases in the meantime being treated as fractures and injuries in other parts of the body and under the same circumstances usually are, any undue overaction or symptoms being combated. Dr. Levis claims that since the employment of these hooks he has seen a number of cases recover, with osseous union, or with such a close coaptation of the fragments as to be indistinguishable from such a desirable result.

PANCOAST'S IRON-DYED SILK SUTURE.

The subject of sutures has of late years been very largely discussed, and many modifications and additions made in this branch of the surgeon's armamentarium, till the list now embraces very nearly everything that possibly could serve the purpose of a suture, from gold wire down through lead, iron, silk and catgut, and all their modifications. The objection we have found to the employment of metal sutures has been that they are more painful in removal than those sutures made of softer material, that certain ones of them, when employed in the exposed portions of the body, have at times a tendency to leave their stains in the tissues in which they are imbedded, and that they cannot be readily accommodated to the size of the eye of the needle with which one may be compelled to work. True, the file will readily remedy this defect, but one does not always have such an instrument handy, and if he does, he does not

care to be bothered filing wire. To meet some of the indications above pointed out, Dr. Wm. H. Pancoast has recently had made an iron-dyed silk, the silk being pure and guaranteed not to contain a cotton filling, as certain silks are known to have. These silks are made in sizes ranging from a very fine thread, suitable for use in operations around the eyelids, etc., to those heavy enough to be employed in ligating the large arterial trunks. Being iron dyed they are not likely to set up any irritation in the tissues, as those silks are which have been colored by chemical processes; the color is warranted to be fully fixed and not to run under any circumstances. Dr. Pancoast claims to have had much more satisfactory results since using this material than when other agents have been employed, and that less irritation is set up by the silk than any form of wire or other suture. As he has been experimenting in this matter for the past three years, his conclusions are worthy of consideration. Personally we have not had, as yet, sufficient experience with the silk to express an opinion, but from accounts given by those who have used it, we are inclined to regard the agent favorably. The plate shows the size of the threads and their commercial number, by which they can be ordered.



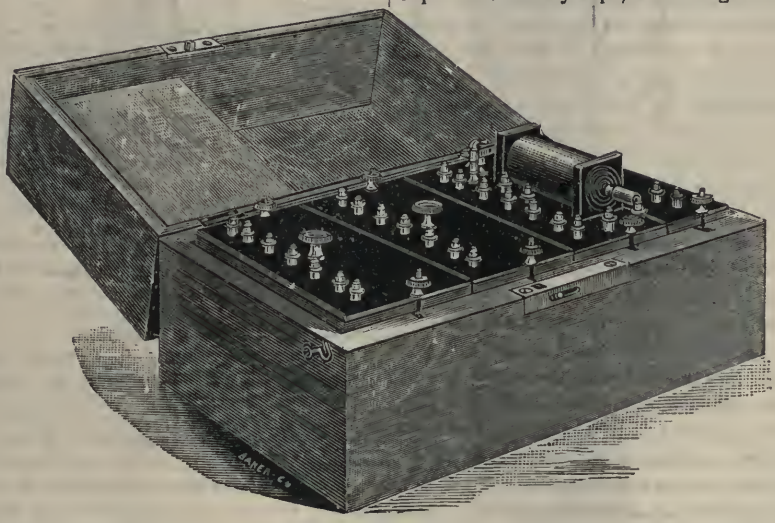
A NEW UTERINE SOUND.

Ease in arriving at a diagnosis is to-day one of the great desiderata of the gynæcologist, and we must admit that, for his assistance, his instruments are, in a measure, as yet almost primitive in their simplicity. These remarks apply more especially to the instruments employed in the diagnosing of flexions and versions in their different degrees. We need some apparatus that, while it is following its course inter-utero, will show, extra-utero, to the manipulator just what course it is pursuing, and the degree to which flexion or version has taken place. Now the expert gynæcologist, of course, will claim he stands in need of no such instrument; that his uterine probe or sound is all that he needs; that he can bend it to a certain curve, introduce it, and that he will almost infallibly be able to tell just where it is, and about what course it is describing: but he must remember that there be those who are not experts; that there are young graduates who have no more knowledge of how to introduce a uterine sound than they have of Choctaw, the average student's experience, under the comprehensive plan of instruction in our so-called first-class colleges, being that which he has had by seeing his professor dexterously give the sound a certain curve, or perhaps only lining the curve out in a general way, on a blackboard.

We are free to confess that we consider it a decidedly risky business to intrust half the graduates with a uterine sound immediately upon their entrance into the profession, and it is for these men, and others too, at times, that an instrument somewhat of the nature under discussion is needed. A sound has made its appearance in this market, introduced, we are told, by a Boston house, that in some respects, when improved, we think will prove a very valuable instrument. It consists of a wire spring or shaft, of about the diameter of the uterine sound, made after the manner of the dental engine flexible shaft; this metal spring, for that is about what it amounts to, measures 12 or 14 inches in length, and possesses a very great deal of flexibility; a thin layer of soft rubber protects the metal portion from all fluids, and hence prevents rusting, etc. A wooden handle is placed about nine inches from the distal extremity. The theory of its operation is this, that the near or external end of the instrument bends in a direct ratio to that of the distal end and in an opposite direction; in other words, if the distal end describes retroflexion, the external extremity will be bent into an anteflexion, the curve expressed being directly as the curve of the concealed end, only in the opposite direction. As we have before said, we have not been enabled to test the instrument ourselves, as yet, but it seems that it might be of use, not only in

uterine examinations, but in examining many other portions of the economy.

Our objections to the instrument as at present made are, that primarily it is roughly finished, the work, seemingly, having been carelessly and hurriedly done; we would suggest as an improvement, that the tips of the instrument be probe pointed and rounded off, instead of being left as they now are, square and more or less sharp on the edges; further, if the last inch were made a little bit more flexible, it seems to us that it would be an improvement, as the instrument would then respond much more quickly to every obstruction or bend met in its course; the rubber coating might also be considerably improved; taking it for all in all, we may say that the idea is fairly good, but the workmanship deficient.



Another instrument recently introduced into this country, from Paris, is the graded nest of hard-rubber anal bougies. Of these there are half a dozen assorted sizes, varying from one and a half inches in diameter down to about a quarter of an inch in diameter; the instruments are made of hard rubber, highly polished, are about twelve to fourteen inches in length, and are packed one within another, thus providing for ease in transportation and doing away with the necessity of carrying a box.

Messrs. Kern, who have imported this instrument here, show also a French syringe for irrigating the eye or ear; this consists of a somewhat flattened barrel, holding about one ounce of fluid, to the extremity of which a cap is screwed, the end of which cap is perforated by pin-holes, to give egress to the water, etc., used; in case it is desired to change the stream from a divided to a solid column or discharge of fluid, all that is necessary to do is to fit over the irrigator a tubular cap, which forms part of the instrument. The chief objection to the syringe is its small size, but it is probable that they will shortly be made to hold larger quantities than they now do.

In the way of electric batteries the latest claimant for popular favor is the McIntosh. A great many are in search of a battery that will give both a galvanic and faradic current. This battery consists of a walnut box, in which is contained a hard-rubber compartment divided into six subcompartments and a drip box; the battery plates consist of zinc and carbon clamped to a hard-rubber top or lid, by means of thumb screws, this rubber plate acting as a cover for the drip cup or the battery cups, according as the battery is active or quiescent; six sets of plates are clamped to each hard rubber cover. By means of the thumb-screws fastening each separate pair of elements, the carbon and metal plates can be changed rapidly and readily, either for repairs or renewal. The under surface of the hard-rubber cover is fitted with a soft-rubber cushion that prevents the spilling or splashing of the cell fluids when in process of transportation; the lid is further screwed down well into place by thumb screws. The cells, six in number, for the production of the induced current are entirely distinct from the rest of the battery, though contained in the same box, and can be, if desired, lifted out and transported separately. Altogether this makes a very compact and at the same time a very desirable battery; the great objection to these combination batteries heretofore has been their liability to be constantly getting out of order; but

this objection seems to be very fairly overcome in this battery.

A very valuable though simple addition to the hypodermic syringe has recently been made by Kern, of this city; this consists of a long, delicate needle, made entirely of aluminium. The great objection to the ordinary steel needle is that it is liable to be corroded by the impossibility of drying the canal of the needle, and that certain fluids corrode the metal rapidly. Frequently, even when good care is taken of the instrument, the needle is found occluded by rust, etc., thus rendering it useless. Aluminium not being readily attacked by the agents ordinarily employed in hypodermic medication, and not being at all influenced by the presence of water, makes, perhaps, the best material possible for the construction of the hypodermic needle, as by it any fluid or agent desired can be readily employed. We would suggest here that, even when in constant use, a hypodermic syringe should occasionally be treated with a few drops of glycerine, as this tends to keep the packing moist, and thus causes better suction in the piston head, a matter of considerable importance, especially when a small quantity of fluid is to be injected.

A new universal uterine scissors is shown also by Kern. This consists of a pair of blades jointed like the ordinary scissors, these blades measuring eight inches in length, slightly curved at the flat. To the ends of these a pair of scissor blades, one inch in length, and so finished on the points as to present a probed appearance, while at the same time a cutting edge is preserved to the extreme ends, are attached; the joint being on the regular hinge principle, the cutting motion is produced by the long blades upon which the scissors proper are mounted. From the cutting blades a wire runs down the convex surface of the long blade handles, passing through an eye just back of the scissor-blade joint on the long arm, and terminates in a ratchet mounted upon a spring, the spaces between the teeth of the ratchet being caught by a stationary bridge. By this wire the cutting blades can be placed at any angle as compared with the long arms of the apparatus, and satisfactorily worked. We should imagine this to be a very desirable scissors, not only for uterine work, but for operations in any locality where there is but little space for ordinary manipulation; it would seem to be particularly available in operations about the throat and nasal passages, the scissor blades working, as they do, at such a variety of angles.

Correspondence.

A Curious Case.

Ed. Med. and Surg. Reporter:—

Mr. Matthew Snow, a laborer; aged 23; weighs 175; strong, muscular; never was sick a day in his life. On the evening of May 26th, while lifting at a large metal wheel, suddenly felt something give way in his bowels, "felt something tear," as he described it, with sharp cutting pain;" he felt sick at the stomach but did not vomit; walked to his boarding house, some half mile; eat a hearty supper; slept well that night. Next day, 27th, being Sunday, walked about, eat his regular meals, felt no inconvenience but soreness in his bowels. At 7 o'clock P.M., after eating a hearty supper, became deathly sick and vomited. I saw him one hour afterwards; found him pale, vomiting, and suffering some pain below the stomach, on the left side. Pain referred to one spot, presenting much the symptoms of strangulated hernia, although he never had any rupture. Gave him brandy and morphia, and ordered warm fomentations over the bowels.

May 28th. Vomited all night; abdomen enlarged and slightly tympanitic; pain paroxysmal; pulse 100; temperature normal; passed urine freely; complains of being cold, but has no regular chill. Consultation with Dr. J. A. Ritchey, of Oil City. Treatment, hypodermic injection of ¼ grain morphia every four hours; turpentine stupes, ice, brandy and milk by the stomach.

May 29th. Still vomiting; pulse 100; temperature 99°; breathing 20; kidneys acting freely; abdomen more enlarged and quite tympanitic; tenderness all over the abdomen.

May 30th. Not suffering so much pain; still vomiting; stomach bulging up above sternum; lies on his back with legs extended; tympanitis increasing; pulse 100; temperature 99½; breathing 22. Treatment continued. Warm water injections.

June 1st. Pulse 104; temperature 101°; breathing 25; vomiting less frequent; not much pain; somewhat under the influence of morphia; still vomiting occasionally; lies on his back with his legs stretched straight down; can't be turned on either side or his knees flexed without causing great pain and vomiting.

June 2d, 3d, 4th and 5th. Condition much the same. Pulse ranging from 98 to 108; temperature from 101° to 103°; still having paroxysms of pain and vomiting.

June 6th. Bowels move freely; discharge very offensive, tinged with blood; pulse 104; temperature 102°; tongue dry and coated brown; swelling but little abated, if any. Treatment, morphia increased to ½ grain. Turpentine, glycerine and sodium mixture applied over the bowels with cotton; ice and milk in small quanties often repeated.

June 7th. Consultation; Drs. Ritchey, Davis, Egbert and Conners, of Oil City; pulse 100; temperature 102°; breathing 30; perspiring freely; tympanites increasing; stomach distended; ribs pressed out on both sides; lies straight on his back; legs stretched; head low; tongue dry; great thirst. Treatment, turpentine

and a mixture of quinine, nux vomica and aromatic sulp. acid; morphia increased to ½ grain doses hypodermically every four hours.

June 8th, 9th, 10th, and 11th. Much in the same condition; temperature and circulation vary but little; vomiting occasionally; kept comfortable under the influence of the anodyne; bowels moving; kidneys acting freely; tympanites increasing. Treatment continued.

June 12th. Patient much in same condition; urine examined; slight acid reaction; otherwise healthy.

June 13th. Consultation, Dr. Snowden, of Franklin; not much change; swelling increasing; circulation, temperature and breathing about the same.

June 14th. Consultation, Dr. Arters, of Oil City; ribs distended on both sides, more on the left; diaphragm pushed up; lungs crowded; heart misplaced; apex beating two inches above nipple; difficult breathing; says he "will burst."

June 15th. Stercoraceous vomiting, throwing up large quantities of fecal matter; pulse 110, temperature normal, breathing 30.

June 16th. Consultation, Drs. Ritchey, Davis and Coope; patient evidently sinking; pulse 120; temperature below normal; breathing 40; nails blue, skin dark, extremities cold; says he is dying; asks me to cut him open."

Passed a minimum sized trocar and canula in median line below navel; large quantity of gas escapes, with strong fecal odor, followed by near a quart of purulent serum; patient much relieved; says he will get well. Left the canula in until the next day.

June 17th. Patient much better. Removed the canula; bowels moving freely; takes milk without vomiting; abdomen very little enlarged.

June 18th. Abdomen distended again with gas. Introduced a large trocar and canula; a good deal of gas escaped, but very little serum. Attached the aspirator pump and pumped into the cavity a quart of ten per cent. carbolized water. Repeated this two or three times, thoroughly washing out the cavity.

June 19th, 20th and 21st. Patient improving, but considerable diarrhœa, which was controlled with bismuth and tannin.

June 22d, 23d and 24th. Convalescing slowly.

July 6th. Forty days from the time of receiving the injury fully recovered, so as to be able to be sent home in a carriage, ten miles in the country. Now I have given you a history of the case and treatment. I have not given any opinion as to what the particular lesion was. Was it intussusception, or some one of the many internal hernias? Why did the patient assume the position of low head and legs stretched straight down, which position he kept through the whole course of his disease?

That the material vomited on the 15th day was fecal matter, all who were present will attest.

That the gas and purulent serum discharged by the trocar and canula had a strong fecal odor was evident to all of us.

All the medical gentlemen who saw the patient agreed that there was traumatic peritoneal inflammation. But as to the particular lesion which caused it, the question was undecided, and as we were cheated out of the post-mortem, it will remain a mystery unless some of your numerous readers will inform us.

Oil City, Pa. T. C. McCulloch.

News and Miscellany.

Society of Hygiene in Madrid.

On the 23d of last April, the King of Spain, accompanied by several Ministers of State, inaugurated the new Society of Hygiene in Madrid. Simultaneously the first number of the Society's Journal, the *Boletin de Higiene*, appeared. The object of the journal, as its name imports, is to keep its readers well abreast of all that is newest and most valuable in sanitary science.

Poisoning from Red Stockings.

Dr. J. Woodland writes to the *Lancet* that, having had his attention called to several cases of great irritation of the feet and legs, causing small pustules to arise and the skin to subsequently exfoliate, and suspicion being fastened upon red stockings which the patients wore, he carefully analyzed them. He found a tin salt which is used as a mordant in fixing the dye. He succeeded in obtaining as much as 22.3 grains of this metal in the form of the dioxide, and as each time the articles are washed the tin salt is rendered more easily soluble, the acid excretions from the feet attack the tin oxide, thus forming an irritating fluid.

Rusty Surgical Instruments.

Apropos of this unpardonable practice, which is still occasionally observed even among good surgeons, the *Lancet* says:—

In a highly sensational and unduly colored sketch, a writer has described in *Knowledge* a case of ascites, to which, some years ago, he called in "the great master of British surgery, Sir Rusty Poyntz," who, on being requested to tap the patient, produced for the purpose a trocar with dull point, rusty sides, and an ill-fitting canula, and, in spite of protest, insisted on using it, pleading, "It don't signify, you know." We cannot pretend to dispute the bare facts of the case, but we may fearlessly assert that no "master of British surgery," great or small, would to-day be found who would perpetrate such a cruelty. But yet there may be quite room even now for a word of warning as to the importance not only of absolutely clean, but of very sharp-cutting instruments. Where anæsthesia is not employed the amount of pain saved by using a knife of the greatest attainable keenness is very great, while in all cases alike, attention to this particular is one of the requisites of the successful surgeon who would obtain speedy healing of wounds. It is not an unknown thing to see two or even more incisions made before skin is divided, and the result must of necessity be a partially bruised and irregular edge, the healing of which is in exactly that measure interfered with.

Comparative Size of Drops.

The following table approximately gives the average number of drops in a *fluid drachm* of the various classes of U. S. P. preparations:—

Sulphuric ether	174	Mixtures	89
Fluid extracts	141	Vinegars	77
Spirits	141	Syrups not containing fluid extracts	69
Tinctures	136	Solutions (1 exception)	66
Volatile oils	131	Diluted acids	61
Oleo-resins	124	EXCEPTIONS:	
Acids (3 exceptions)	123	Sol. nitrate of mercury	131
Wines	106	Nitro-muriatic acid	76
Fixed oils	103	Muriatic acid	70
Syrups containing fluid extracts	97	Sulphurous acid	59

Flowers for Hospitals.

We are glad to note the "*flower service*" (as it is termed) which obtains in England. On a recent day the church of St. John, at Paddington, was the scene of one these "*flower services*," when the chancel was one mass of flowers and fruit, the offerings of children to the sick in the hospitals. This is a most excellent example to follow in this country.

Vivisection.

The following communication to the *Lancet* of a recent date is interesting, on account of the violent anti-vivisection excitement that is now agitating England:—

SIR:—In the *Times* of this morning there is an account of the State ball given by command of Her Majesty, at Buckingham Palace, last evening. Among other announcements of the dresses worn by Royal and noble ladies is the following: "Her Royal Highness, Princess Christian of Schleswig-Holstein, wore a dress of white satin and tulle, trimmed with bunches of pale pink roses and *humming birds*. I, of course, was not present, but I can imagine the panic that Her Royal Highness's appearance must have caused among the sympathizers with the anti-vivisection agitation! Surely some of them must have been ready to swoon away at such a parade of slaughter—such a holocaust at the shrine of the Goddess of Fashion.

Pen Picture of Pasteur.

M. Pasteur is described as a man of low stature and powerful frame—spare, angular, and weather beaten. Of humble origin, the son of hard-working parents, he bears the indications of his race and hereditary bias in every lineament of his countenance and every movement of his well knit, muscular physique. He is a man of few words, abrupt but clear in his sentences, logical, and to the point. His style of speaking is what would be ordinarily called argumentative; his voice is clear and distinct, but unemotional, and his gestures are quick and impetuous, although wanting in the elegance that arises from early training. It is a very curious fact, but one that finds its correlative in the lives of Wallace, the celebrated British naturalist, and Professor Crookes, the great master in physics, that, although his fame rests upon minute researches of the most material complexion, M. Pasteur is an ardent and steadfast believer in spiritualism. He takes no interest in the positivist doctrines of Comte or in the evolution theories of Herbert Spencer, who, he thinks, overlook the central fact of the universe, infinity. Like M. Littre, he holds that without a spiritual link the human family would fall to pieces and nations degenerate into barbarian hordes. In his own neighborhood, M. Pasteur is a man of political and social weight, and in his own house he is the soul of genial and pleasant hospitality.

Items.

Errata.—On page 213, first column, line 23 from bottom, for *water* read *alcohol*.

—Dr. J. W. McLane, of New York, does not place much reliance on a skimmed milk diet for albuminuria.

—"What is the action of disinfectants?" was asked of a medical student. "They smell so bad that people open the door and fresh air gets in," was the reply."

—"I wouldn't be in Egypt," said Mrs. McGill, last week, "for all the wealth of Creosote." Seeing a look of astonishment in the faces of her auditors, she added: "Creosote, you know, was an old Roman god, and everything he touched turned into gold."

—Dr. Riembault, in a communication made to the Paris Academy of Medicine, states that he has made a series of researches with reference to "miners' anæmia," and he believes that this affection is due to the presence of a worm of the filaria species, and not to that of the *ankylostomum duodenale*, as asserted by M. Perroncito, of Turin.

MARRIAGES.

HUTTON—WOODWORTH.—At Fergus Falls, Minn., July 11th, 1882, Dr. Terry J. Hutton and Miss Hattie J. Woodworth.

CHAMPLIN—SHERWOOD.—In Syracuse, N. Y., July 12th, by Rev. Henry W. Sherwood, Henry W. Champlin, M.D., of Chelsea, Mich., formerly of Orwell, Pa., and Della A. Sherwood, of Owego, N. Y.

LOVELAND—STERLING.—On Thursday, Aug. 3d, 1882, at the Calvary Presbyterian Church, West Brighton, Staten Island, by the Rev. Theo. A. Leggett, Dr. T. O. Loveland, of Boston, and Bessie May, daughter of Erasmus Sterling.

McCLELLAN—YOST.—On Tuesday evening, Aug. 1st, by the Rev. Lawrence Guerin, at the residence of the bride's parents, 233 Garrard street, Covington, Ky., Dr. James S McClellan, of Bellaire, O., and Miss Lillie V. Yost.

WEEKS—UMSTEAD.—On Wednesday, Aug 2d, 1882, by Rev. F. C. Pearson, Dr. Albert Weeks, of Phœnixville, and Miss Mary E. Umstead, of Pottstown, Montgomery county, Pa.

DEATHS.

DE GRAW.—At San Francisco, Cal., July 26th, in the 46th year of his age, Dr. Charles S. De Graw, of New Jersey, formerly Assistant Surgeon, U. S. A.

JACOBY.—On the 7th inst., at Sumneytown, Montgomery county, Pa., Henry S. Jacoby, M.D., son of the late Daniel Jacoby.

LOMBARD—In Colebrook, N. H., July 8th, E. D. Lombard, M.D., aged 47 years.

MUSSEY.—In Cincinnati, O., Dr. Wm. H. Mussey, Tuesday, Aug. 1st, in his 64th year, of apoplexy.

SOUTHWORTH.—In New York, on Tuesday, Aug. 15th, Edward Southworth, M.D., in the 24th year of his age.

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Original Department.

Communications.

THE LANCET IN DENTITION.

BY THOS. S. SOZINSKEY, M.D., PH. D.,
Of Philadelphia.

It is noted by Southey, in his common-place book, "The Doctor," that "Progers, who had been about the person of Charles the Second, died at ninety-six, in cutting his teeth. He had four, and many others were coming, which so inflamed his gums that it proved fatal." Poor old Progers! "Cutting of the teeth" is, rightly or wrongly, credited popularly, with the destruction of many lives, and it would seem from this case that it is liable to be accused of being at work even in the terminal stage of existence. In the nursery it has always, perhaps, been regarded as a very serious matter. Nevertheless, this common belief, like many another, may not be well founded. Cumulative tradition has possibly served to, at least excessively emphasize the balefulness of the process. It may, however, be taken for granted, I believe, that the amount of suffering experienced by children in general while getting their primary teeth is very considerable. It causes decided uneasiness in almost all, and decided danger in some. If it rarely or never destroys life directly, it certainly not unfrequently does indirectly. But I am not sure that it is entirely wrong to give it as the actual cause of death in not a few cases. This is at any rate done. In Philadelphia, about thirty deaths are attributed to it, on the average, yearly, in the bills of mortality. During the census year ending June 30th, 1870, there were three thousand two hundred and forty-seven deaths attributed to it in the United States. There is assuredly some ground for the prevailing belief that dentition is the direct or indirect source from which flow many of the ills and a large share of the mortality of babies.

It would appear, however, that there are some physicians who seriously regard the coming of the teeth as an extremely innocent matter, being, as they say, a purely physiological process. I would advise such that it is assuming a great deal to take it for granted that dentition is in all cases a purely physiological process. Perhaps in no child is it absolutely physiological; it is at best only approximately physiological. In a recent address, Dr. B. W. Richardson went so far as to declare that he "had never seen a healthy child," never one "that had not in it either some actual or latent constitutional disease." At any rate, there is good reason for believing that in a large proportion of children, especially in large cities, dentition is of decidedly pathological import. As is true of many other troubles, it generally tends to be more marked in proportion to the degree of unhealthiness of the child. And let it be borne in mind that the sensibility of all infants is great, and of some sickly ones such that even a trifling irritation may be followed by serious constitutional and other effects.

But it is not my purpose to speak of the subject of dentition. This has been done very well in a lecture published in this journal recently. It may be well, however, to say, in the words of John Hunter, in his admirable treatise on the natural history and diseases of the teeth, "the symptoms are so various in

different children, and often in the same child, that it is difficult to conceive them to be from the same origin, and the varieties are such as seem to be beyond our knowledge."

Now, when to the discerning senses of the observing, sensible physician a child is suffering severely from the eruption of one or more teeth, relief should, of course, be procured as soon as possible. How is this end to be attained? The advice given by many amounts to little more than to use a soothing-syrup—a la Winslow—of some sort. Meeting the various indications is, in truth, in numerous cases, far from being an easy matter. Such measures as serve to favor the general health are particularly indicated in every case. Careful regulation of the diet, daily bathing and a fair amount of exercise, especially in the open air, are among the items of great significance. Make the process as little pathological as possible by making the condition of the child as physiological as possible. Anodynes, antacids, febrifuges and other remedies, including local applications, may or may not be called for. But I believe the remedy most imperiously called for, in at least bad cases, lies in the use of the lancet.

Of the use of the lancet in dentition it is curious to observe how different are the opinions entertained. Some do not hesitate to say that it is of no value. Thus, in a recent widely circulated work on the diseases of children, by Dr. Henoch, a Berlin practitioner of seemingly large experience, it is said: "It is now generally held that every attempt to facilitate the eruption of the teeth, and thus remove the symptoms due to difficult dentition, is absolutely useless. I have in earlier years performed scarification with sufficient frequency to convince myself of its entire inutility; and it even appears to me that the cicatrix formed may increase the difficulties connected with the penetration of the teeth." Here is what Dr. J. Lewis Smith says on the subject, in his work on the diseases of infancy and childhood: "The gum-lancet is now much less frequently employed than formerly. It is used more by the ignorant practitioner who is deficient in the ability to diagnosticate obscure diseases, than by one of intelligence, who can discern more clearly the true pathological state. Its use is more frequent in some countries, as in England, under the teaching of great names, than in others, as France, where the highest authorities, as Rilliet and Barthez, discountenance it. . . . . I know no accidents of dentition which require prompt scarification, except suppurative inflammation of the gums, convulsions, and paralysis. In other cases the operation may be safely postponed till other measures have been employed." In Drs. Meigs and Pepper's treatise on the diseases of children it is said: "Lancing of the gums is undoubtedly a most important point in this [laryngismus stridulus] and other diseases of childhood connected with dentition. We have long been convinced, however, from personal observation, that a resort to this operation merely because the child is passing through the period of dentition is at least useless. We have never found it to do any good unless the teeth are near enough to the surface to produce manifest swelling, attended with heat and soreness of the gums. So long as the gum is hard, insensible, not turgid, and of its natural color, and the mouth not hot, cutting has done no good." That wise old master of the healing art, John Hunter, after speaking of symptoms arising from dentition says, "So far as my experience has taught me, to cut the gum down to the teeth appears to be the only method of cure."

Truly the authors quoted from differ sufficiently as to the value of the lancet in dentition. It is worth while to dwell a little on what they say.

Dr. Henoch speaks very rashly, to say the least, in declaring that "it is generally held that every attempt to facilitate the eruption of the teeth is absolutely useless." The idea was not formed from an extensive acquaintance with the literature of the subject. Again, the statement of the Doctor as to his experience with the use of the lancet may well lead one to infer that he has had hardly any experience with it. He is like those who, although having no knowledge of the use of the lancet in general medicine, yet unhesitatingly venture to condemn it. What he has to say about "the cicatrix" may rightly produce the impression that he has not made himself master of the subject. If the lancing is properly done, there need be no cicatrix; and if there be one it will not serve to retard the "penetration" of the tooth. As Hunter long ago said, at the point of cicatrix the gum offers the least resistance to the appearance of the tooth.

Dr. Smith is doubtless right in holding that ignorant practitioners are very apt to use the lancet when not required, and in his intimation, that the use of it is largely a matter of fashion. But I am also quite sure that too many practitioners who are usually regarded as intelligent do not use it as often as they should. His statement that he "knows no accidents of dentition which require prompt scarification, except suppurative inflammation of the gums, convulsions

and paralysis," is a trifle extraordinary. What of cases of, say, laryngismus stridulus and of cholera infantum, in which dentition bears largely a causative relation? Except in the diseases he mentions, the Doctor would postpone the operation "till other measures have been employed." It scarcely follows from this that he is acquainted with the cardinal principle of sound medical practice. In treating of the same subject, Hunter correctly remarks, "It would be better at once to remove the cause, than to be attempting from time to time to remove or palliate the effect." Wasting time trying to palliate effects, while the cause is allowed to act, lets many a little innocent go unnecessarily and speedily into the grave.

Drs. Meigs and Pepper "have long been convinced, from personal observation, that a resort to the operation merely because the child is passing through the period of dentition is at least useless." It is rather strange that they were ever otherwise than "convinced." No sensible physician cuts a child's gums indiscriminately. Resorting to the lancet when there is no evident need for it, no matter how the child is affected, is, as Dr. West fitly says, "barbarous empiricism." The idea that it is the approach of the teeth "near to the surface" which produces the troubles which are met with in dentition is not of necessity a truth. At least the main source of trouble in the appearance of a tooth is not at the surface; it is at the base. The backward pressure on the sensitive nerves and other parts gives rise largely to the pain and irritation about the gum. This backward pressure may set up trouble a considerable time before the tooth nears the surface, the tension then being almost or quite as great as later. In fact it often, or perhaps I should say generally, happens that there is a spell of trouble some time before the tooth is about to make its appearance. In some it is very marked and it may be repeated. The capsule becomes distended and the surrounding parts hyperæmic and painful, and there is a free flow of saliva. In any case where there is evidently decided irritation about the gum the lancet should be used. It should be used even if for no other reason than to relieve the child of local pain, of toothache, an affliction which, as many know, and Burns told in expressive poetic phrase, is something awful enough in itself, a pain which at its worst Bacon had reason in believing to be "one of the sharpest of pains." There need be no hesitancy in using the lancet repeatedly if the gum is at any point tense and angry looking. Says Hunter, "I have performed the operation above ten times upon the same tooth, where the disease had recurred so often, and every time with the absolute removal of the symptoms."

That the lancet will afford relief in the presence of very marked symptoms every one surely is aware who knows how to use it. It is an instrument by which much may be done to lessen suffering, cure disease and save life. Here is a delicate child, somewhat over a year old, languid, pale, the victim of one or two convulsions, with contracted brows, a temperature of from 101° to 102°, a tendency to diarrhœa, and a slight bronchitic cough. I lance his cutting tooth, and within a few hours he is almost entirely well. I have done the thing so often in his case that I know precisely what the result will be. This lymphatic child of fifteen months has a developing croup; the hurried breathing, the noise in the throat and all the other symptoms are becoming decided. I lance his appearing eye teeth and he begins immediately to get well. There is a strong looking boy, nearly two years old, with a temperature of 103°, and a marked cold on his chest. I prescribe appropriate remedies but at the end of two days he is no better. I lance a pair of coming molars, and next day there is no fever hardly, and the cough speedily vanishes. That poorly cared for child, who has about completed her first year, is evidently, from the high fever (103.5°), nausea and tendency to diarrhœa, drifting into the fatal grasp of cholera infantum, the midsummer heat favoring the development of that serious infantile disease. I look at her mouth and find that the gums over both the eye- and the stomach-teeth are tense and angry looking. I lance these points, and very simple measures restore the patient, within forty-eight hours, to her usual state of health. But I need not give an extended recital of cases. I am of the opinion that early, and, if need be, repeated lancing would save many who should otherwise perish from convulsions, bronchitis, cholera infantum and other diseases. Especially in spent children, in the warmer part of the year, should there be no delay. Statistics of the census year ending June 30th, 1870, show that there are more deaths attributable to dentition in the third quarter of the year than in the two preceding ones together, and many more than in the first and fourth together. The Philadelphia bills of mortality present a very similar showing.

In order that lancing the gums may do as much good as possible it must be done well, but, of course, not butcherly. A plain incision with

a very sharp lancet is not enough; it will generally do only a little good. This is what is not uncommonly done. Let there be several more or less irregular incisions made, with a somewhat dull lancet, and the hoped for result will very certainly follow. In bad cases the gum should be very thoroughly scarified, so thoroughly that there will be little or no likelihood of the parts uniting over the tooth. And it is proper to extend the incisions well to the sides of the coming tooth. This may be called for after the tooth has partly appeared. Whatever bleeding occurs will be beneficial; it will serve to relieve the hyperæmia and pain. In fact, in not a few cases it is the bleeding that is principally called for; local depletion affords immediate relief. It will not be harmfully profuse, likely, in any case. Says Hunter, "I never saw a case where the bleeding proved either inconvenient or dangerous."

What harm may result from lancing the gums, under any but very extraordinary circumstances, it would be hard to state. I do not feel sure that it can do any, and in this belief I am fortified by the opinions of perhaps all dentists and others who have carefully studied the matter. It may cause temporary pain. Still, this is not very marked. Many a child will open its mouth and have several teeth thoroughly lanced without giving a whimper. As for the tenderness of the gum, which there may be for a day or two, from thorough lancing, it is comparatively a small matter. The idea that lancing will retard the development of the tooth has, I believe, no just foundation. It would appear to be based on the erroneous notion that when lancing is practiced the tooth should immediately appear. It is probable that in no case is there any more than an apparent delay. As already stated, the irritation about the gum which calls for the use of the lancet may arise weeks before the tooth approaches the surface. A tooth does not receive its nourishment from the structures above or about its crown. The cicatrix and hemorrhage I have already spoken of at sufficient length. In all proper cases the lancet may, then, be used, with confidence that it is a markedly non-injurious, as well as an almost infallible means of relief.

—In Berlin, has been formed a society similar to the English Ambulance Association. It was done at the suggestion of Prof. Esmarch, and the Empress has accepted the "Protectorat." The intention is to have, in cases of accident, all necessary professional and other needful service rapidly on hand.

ANEURISM OF AXILLARY ARTERY, FOLLOWING LUXATION OF HUMERUS.

REPORTED BY V. KERSEY, M.D.,
Of Pittsburgh, Pa.

Notes of the following interesting case were furnished by Dr. Jos. Dickson, of Pittsburgh, Pa.:—

Levi P., aged 24 years, farmer, of previously good health, sustained a sub-coracoid luxation of the right humerus, on October 27th, 1878. He was in the act of stepping over the "tumbling shaft" of a threshing machine, when he tripped and fell, the revolving shaft catching his clothing and carrying him around a number of times. Dr. K., of Evansburg, Pa., saw the patient within a short time, and discovered a sub-coracoid dislocation of the humerus. He effected reduction without much difficulty, by the following manipulation:—

The arm being raised perpendicularly to the body by an assistant, the doctor placed his left hand, thickly enveloped in the folds of a towel, in the axilla, and at the same time made forcible counter pressure with the right hand over the acromion.

Since the time of the injury patient states that he has felt "something hard under the arm;" six weeks ago he discovered a lump in the axillary space, and three weeks ago he noticed it pulsating, or "beating, like his heart." On January 4th, 1879, he consulted Dr. Dickson, who stated to him that he was suffering from an aneurism of the axillary artery, and advised him to begin treatment at once. To this he consented, and it was decided to try the effect of digital compression. He was previously prepared, by light diet and free purgation, and on January 6th, at 1.20 P.M., he was placed in bed. At this date the tumor was the size of a small orange, located in the centre of the axillary space, painless, pulsating, and possessing a marked bruit.

He states that in the first week of its existence its growth was quite rapid; later, it grew more slowly. His sufferings, which have not been excessive, consisted of wandering pain shooting down the arm and across the chest.

The axillary temperature of the two sides varied one degree, that of the right being higher.

Radial pulse of right side was weaker than the left. He was placed in a recumbent position, and the supra-clavicular region of right side dusted with subcarbonate of bismuth. One fourth grain of sulphate of morphia was administered by the mouth.

Digital compression, made by the thumb of the assistants, of which there were several, was ef-

fectual in controlling pulsation in the tumor. The hand of the assistant grasped the shoulder of the patient from behind, and the thumb pressed upon the subclavian artery, at the point where it crosses the first rib. Pressure, by means of the assistants present, was thus maintained steadily for eight hours. Occasional doses of morphia were administered, when he complained of pain. At the end of this time no pulsation could be detected in the tumor, and pressure was removed. He was advised to remain in bed for one week, and to carefully avoid exercise for several weeks. After a few directions concerning his diet and drink, he was dismissed as cured. No more was seen or heard of him until January 9th, 1879, when he presented himself with the tumor again pulsating.

The axillary temperature and the pulse were identical upon the two sides. The tumor was smaller, firmer and denser than when first seen, but is pulsating quite perceptibly and possesses a marked bruit.

He was again placed upon spare diet, and subjected to free purgation, and on January 17th, with previous preliminaries, systematic digital compression of the subclavian was a second time commenced.

The pressure was so applied as to check all pulsation in tumor, and in the arteries below. When pressure was begun, patient complained of sense of fullness about the head and face, and numbness of arm and hand. Morphia sulphate was administered during the first twenty-four hours, as needed to quiet pain. Tinct. veratrum viride (Norwood's), was administered in two minim doses, hourly, to reduce the pulse-rate; its use was discontinued when pulse-rate fell to 100 beats per minute.

His nourishment consisted of half a pint of warm milk and bread every six hours. He was allowed very small amounts of water. At the end of twenty-four hours, when all pressure was removed for a few moments, the radial artery could be felt faintly pulsating, although no pulsation could be discovered in the tumor.

January 20th, auscultation revealed a loud and distinct bruit in that portion of the tumor opposite the central division of the pectoralis major muscle. This bruit was only noticeable after pressure had been removed for several minutes.

On January 24th, one week after commencement of second period of treatment, all pressure was removed; on this day the tumor was quite small, and, except a great numbness and lack of power in the arm, he was practically well. In one week he had so far regained the use of his arm as to be able to feed and dress himself without assistance; he was discharged from treatment.

On January 2d, 1882, patient presented himself at Dr. Dickson's office, and was carefully examined by Dr. McCann and Dr. Dickson. Nothing of the tumor could be found, and patient stated that the limb was "as good as ever."

COLD TREATMENT OF SCARLATINA.

BY JAMES Y. SHEARER, M.D.,
Of Sinking Spring, Pa.

Read before the Berks County Medical Society.

Mr. President and Gentlemen of the Medical Society of the County of Berks:—

In obedience to the wishes of the Society I appear before you, to address you on a subject of great importance, viz., cold water or ice in the treatment of scarlatina. When men of eminent skill in the profession differ so widely in their views as on this subject, there must be something of so great an importance attached to it that it cannot be overrated. Such a dreadful scourge as scarlet fever, which carries away its victims by the thousands and fills the land with mourning, ought to be studied and sifted with the closest attention. When we consider the fatal nature of this disease, we should not hesitate to resort to the best and safest remedy, no matter what our choice treatment may be. I consider it the duty of the practitioner to gather all the information relating to the treatment of scarlatina, coming from a reliable and trustworthy source, that he may be able to acquire.

I have no hesitation in saying that the ice-treatment in scarlatina is preëminently proper. My own experience during the last fourteen years fully convinces me of the truth of this assertion. It is true this treatment has met with some opposition in the ranks of the profession. Some doctors seem to be unwilling to accord to it the merits which I think it deserves. There are different reasons for this unwillingness. First, their prejudice prevents them from using it, and in the next place (when they do use it) they lack discretion in its application.

In the May number of the *American Journal of the Medical Sciences* for 1833, there appears a communication from Dr. Samuel Jackson, of Northumberland, Pa., in favor of the cold or ice treatment in scarlatina. I believe Dr. Jackson first advocated *in print* this treatment in this country. Great credit is due to him for venturing to advocate in print a practice or treatment which was condemned generally, not only by the

laity but by the profession as well. Dr. Chapman, of the University of Pennsylvania, in 1826-27, vehemently opposed this treatment in his lectures to the students. But Dr. Hiram Corson, of Conshohocken, Pa., although having listened to those very lectures of Dr. Chapman, and having imbibed the false doctrines imparted to him, about a year thereafter, in the face of a perfect storm of opposition, used cold water in scarlatina with the most happy results. Before giving my mode of treatment, let us glance for a moment at the disease.

It is well settled that scarlatina is divided into *scarlatina simplex*, *scarlatina anginosa*, and *scarlatina maligna*.

In scarlatina simplex the fever is seldom active ; the cutaneous efflorescence is complete, but there is scarcely any inflammation of the throat.

In scarlatina anginosa the febrile excitement is greater, the eruption is complete, and there is always inflammation of the throat.

In scarlatina maligna the fever is of a depressing character, with considerable depression of the vital forces, and besides the other symptoms of scarlatina in general, a sloughing inflammation of the throat.

In scarlatina anginosa there are always the usual symptoms of pyrexia, preceded by a peculiar lassitude. The affection of the fauces is always prominent ; stiffness of the jaws, soreness of the throat, and pain in swallowing, are often experienced in the commencement. The inflammation of the fauces advances with the progress of the disease, and patches of a concrete exudation are generally seen on the surface of the tonsils. In adults a strong chill is the first symptom ; in children, a violent convulsion or a succession of them, or a severe attack of vomiting, with prostration. The eruption makes its appearance at the end of the first, or the beginning of the second day. As vomiting greatly prostrates the patient, a great deal of it shows the severity of the disease. The heat under the tongue is very great. In fact, the temperature in this disease exceeds that in every other fever. It is affirmed by some writers that in some instances it arose to 112 degrees, Fahr.

I have used cold water in scarlatina for upwards of twenty years. In May, 1862, I was called to see a little boy about ten years old, who had a very severe attack of scarlet fever. I found him in convulsions and unconscious, from the very high fever. After a careful examination of the patient, I made up my mind that the boy would die, and so apprised the family. I concluded that the only way to give relief to the patient was by reducing the temperature, and to do it promptly and effectually, I stripped the boy and sponged the whole body with cold water. In less than thirty minutes the convulsions ceased, the temperature was very much reduced, the patient had rest, and both the family and myself had hopes of the boy's ultimate recovery. The fever, however, commenced increasing shortly after the cessation of the sponging, as expected, and in about two hours convulsions again set in. I was promptly sent for again, and repeated the sponging with the same result. This had to be done at least six times before breaking the fever effectually, with the period of time increasing between each interval.

Every time when the convulsions ceased the boy told me how good the cold water felt, which I considered strong evidence of the counteraction which the cold water produced upon the high fever. Before the first application was made the eruption had a bluish color, but after the application of cold water it assumed a red, normal hue. The recovery of the patient was speedy, and this without anything else except a little sweet spirits of nitre. To make the efficacy of this treatment more convincing to me, I was called to see a child of about the same age, about two weeks thereafter, that had scarlet fever, and was suffering in the same manner. This was exactly a parallel case—the same in all its bearings. The parents positively refused to let me touch the child with anything cold. I told them the great danger their child was in, and my unflinching confidence in the cold water treatment ; but all without success. They persisted in having their own way. I resorted to all means recommended by the authors, but all my efforts were futile, and the child died. I have never been shaken in my steadfast opinion that if I had been permitted to treat that child according to my wishes and inclinations, with cold water, I could have saved its life.

During an epidemic in 1868 I treated forty cases with ice and cold water, and was successful in all except one case, and that was a very weak and puny child, only six months old, and otherwise deformed.

Two years ago I attended a family who had only two children. Both were taken sick at the same time, with scarlatina. I at once noticed the malignancy of the disease, and knew that I was wrestling with a foe that required prompt and heroic action to subdue. The throats were swollen, having gangrenous spots, accompanied by great physical prostration ; in fact, the patients were fast approaching the threshold of

eternity. Both parents and grandparents were opposed to the ice treatment, arguing that it was an application for the *dead* and not for the *living*. I, however, explained to them the theory of the ice treatment, and they, being intelligent people, yielded to my importunities. I at once applied ice externally to the throats, gave them ice to eat and cold water to drink, and in less than ten hours relief was apparent, and in twenty-four hours they were beyond serious danger. Although it took two weeks to restore them fully to health, I have no doubt in my mind that without the use of ice neither one would have recovered.

The mother took it also, and in a violent form. In the case of her children she strenuously opposed the use of ice; but in her own case, having seen the good results of it in the cure of her children, she manifested not the slightest opposition to its use. After applying it to her throat, and using it with care, she realized such good results that she cannot speak too highly of it. These are only some of the many cases I might mention, and which I treated with similar success.

During the last year, I have treated some forty cases of scarlatina, and only four of my patients died; and in these four cases the parents would positively not allow me to use ice.

My mode of applying ice to the throat is not on the bare skin, but have a muslin between the skin and the ice; and great care should be taken to get it to the inflamed glands of the neck. Place it between two bandages of muslin, and then apply it to the glands, tying the bandages over the crown of the head.

In all my cases in which I used ice, there were no sequelæ.

During the last twenty years of my practice I have, in scarlatina, uniformly followed the treatment just described, except in some few cases when the parents' opposition to it prevented me, and my success has been such as not only gave me great satisfaction, but it has been so invariable, that I feel it my duty not only to recommend it, but to appeal to the profession to give it a fair and impartial trial.

GHEEL.

An abstract of a paper read before the Medical Society of the State of Pennsylvania,

BY S. S. SCHULTZ, M.D.,

Of Danville, Pa.

Gheel had its origin as a place for the abode and treatment of the insane, some twelve or thirteen centuries ago. The belief then first became current that presence at the shrine of St. Dympna, who was murdered in a fit of maniacal fury by her father, an Irish king, from whose unnatural passion she had sought shelter in Belgium, cured convulsive diseases and insanity. This superstition brought the insane from far to be cured at this place, and they were, for the sake of charity and money, received into the homes of the peasants, and those who now form the class of inhabitants called guardian nurses may be literally taken to be their descendants.

The commune and borough of Gheel are divided into four sections, each of which, with many exceptions, receives only a particular class of patients, and is in charge of a physician who visits them once a week, and of a supervisor who makes his visits once a day. The 1200 or 1500 patients are scattered through the commune, which is some seven miles square. From one to four are received into one house.

Some of the houses are capacious and comfortable; others—and about twelve and a half per cent. of the patients are accommodated in such—are very humble and destitute of comfort and the necessary appliances for taking care of the sick. Floors are of clay or brick, roofs thatched, and sleeping places are reached by ladder, and are often immediately under the roof and without windows. One place on the first floor has often to serve for sitting and dining rooms, kitchen and wash-house for the entire family, sane and insane. Such places are on the outskirts of the colony, and are not usually reached by ordinary visitors. During the autumn chills and fever are, in such quarters, frequent, both among nurses and patients.

The mass of patients, no doubt, have great freedom, but others are restrained in a way that would be considered very objectionable in an ordinary hospital, and would not be necessary.

Not all classes of the insane are received, but only such as are best adapted to the family treatment, and Gheel could never take the place of an ordinary State hospital, on this account.

In order to accommodate such as become temporarily excited or dangerous, and those who get there in violation of the rules,* an infirmary has, in recent years, been built, not differing essentially from an ordinary hospital for the insane. This surrenders the idea that family treatment is suitable for the insane as a class.

Patients being so widely scattered through the township makes efficient supervision impossible, and such supervision is absolutely necessary for

* Excluding the dangerous and otherwise objectionable.

the proper care of any dependent class, and especially the insane.

A second Gheel, even if it were desirable, could probably never again be established. It had its origin in a peculiar combination of circumstances, without which it could not have originated, and which are not likely to occur again.

A CASE OF ACUTE HYDROCEPHALUS.

BY CHARLES F. SPANGLER, M.D.,

Of York, Pa.

(Read at the Session of the York County Medical Society, July 6th, 1882.

Modern scientific investigation concerning affections of the cerebral organs have demonstrated that acute hydrocephalus, of the idiopathic character, is of rare occurrence, and that nearly all of the so-called cases have now been ascertained to be instances of tubercular meningitis.

Meningitis with an abundant serous effusion has been called acute hydrocephalus, and older writers, including Beddoes, Condie, Cullen, Thomas, Watson and others, invariably employed the term synonymously with inflammation; but the term should be limited strictly to a non-inflammatory, non-tubercular or dropsical affection.

The arachnoid being analogous to other serous membranes of the body, is subject to like pathological conditions, producing abnormal aqueous secretions proportionately as the intercranial vessels present anatomical and functional peculiarities. And it is not impossible that a disturbing agent exists, so affecting the cerebral blood current as to produce an abnormal exudation of serum. This occurs in chronic hydrocephalus, and it is when the morbid action manifests its influence in a greater degree of intensity that we have the acute form of the disease.

The case which came under my observation in May last was that of a white male child, aged 20 months, of fine, robust appearance, and of unquestionable antecedents. Had always enjoyed good health prior to the above-mentioned period, when the following features were presented, viz.: The child appeared dull, drowsy, with indisposition to exertion, indifference to surrounding objects, and impaired muscular coördination, the temperature and pulse indicating a fever of moderate intensity; tongue thinly coated with a whitish fur; anorexia, nausea and constipation, with a short, dry cough, continuing thus for about forty-eight hours, when there was a decided improvement, the patient appearing apparently well. Physical exploration of the chest revealed a normal lung and heart, with the exception of a mild form of bronchitis. However, during the night of the third day symptoms of greater gravity became manifest. There was evidence of cephalalgia, great restlessness, flushed countenance, injected conjunctiva, contracted pupil, and the retinæ morbidly sensitive to light, the skin hot and dry, temperature elevated, pulse full and ra id, respiration hurried, active delirium, convulsions and left-sided hemiplegia. Synchronously with the onset of coma and hemiplegia was a conspicuous decline in the temperature, in the frequency of the respiratory movement and cardiac pulsations: the palpebræ remained unclosed, the pupils dilated, the eye no longer is over-sensitive to light, and almost complete anæsthesia of the surface is present.

The symptoms of active hyperæmia gradually gave way to those evincing pressure upon the hemispheres. The coma becomes more profound, the hemiplegia more decided, the respiratory movement more enfeebled and interrupted, until the sixth day of the disease, when death occurred. During the later stage of the malady, when the child was raised to the sitting posture, the head falling forward upon the chest or backward upon the pillow, a distinct gurgle or splashing sound was elicited by the fluid propelled against the walls of the cranium, audible at a considerable distance from the bedside. This phenomenon was reproduced even after death.

The head was well developed and in proportion to the general contour of the body. The bones of normal density, strongly sutured, and the fontanelles nearly obliterated. Unfortunately, an autopsy being unattainable, the anatomical characteristics could not be ascertained, but the nature of the lesion is reasonably indicated by the suddenness of the attack, occurring in a previously healthy subject of good family history, in which, owing to defective intercranial blood supply, from whatever cause, there ensues congestive symptoms of a passive character, continuing for a time, with a period of remission, followed by an active congestion, the symptoms of which are rapidly superseded by those of pressure from the extravasated serum.

The accumulation of the fluid being almost simultaneous with the occurrence of hyperæmia and the overwhelming effects of the abundant effusion in arresting the elements of vitality, justly ascribe the case as one of acute hydrocephalus, unconnected with tubercle or inflammation.

The treatment during the earlier stage was purgation followed by potassium bromid. in combination with the tincture of the root of aconite, continued throughout the hyperæmic condition, in conjunction with cold to the head and warmth to the extremities. When evidence of effusion was perceptible the compound solution of iodine was administered in suitable doses, with inunctions of mercury.

DIPHTHERIA; ITS ETIOLOGY AND TREATMENT.

BY H. L. GETZ, M.D.,
Of Marshalltown, Iowa.

In your issue of February 4th, 1882, appeared an article, under "Special Reports," on Diphtheria, which I wish to commend, and upon this subject express my views.

Concerning the seat of the disease there can be little doubt; nay, there can be no doubt in the minds of those who have had experience with the disease, that if it is not a constitutional disease at the outset, it very soon becomes such. And if the disease is communicable through drinking milk, etc., while micrococci may attach to the fauces and tonsils, and thence originate the disease, it is quite as likely that some may be and are carried into the stomach, and so on into the circulation. And in such an event it would be possible for the disease to be sometimes first constitutional and at others first local. In either event, if the disease germs are lodged anywhere in the system, local or otherwise, the constitutional and the local symptoms will soon be manifest; so that the treatment resolves itself into local and constitutional, from the outset. At any rate, this is the only safe mode to adopt. In some instances, if the disease were purely local (which I believe it may sometimes be), and we had some means by which we might to a certainty settle this point, we might then adopt a purely local treatment, perhaps with success, if the cases were recognized in their incipiency; but having no such means we must be alike prompt in local and constitutional treatment, if we would save our patient, for delay in either is almost certain death. I wish to be understood as speaking of diphtheria proper (not homœopathic diphtheria, *i. e.*, simple ulcerated tonsillitis, which, in nearly, if not all, instances will get well in a few days without treatment of any kind). A few points concerning the treatment:—

My experience and observation extend over a period of eight years. I have seen the disease in its various stages and types. If you begin treatment within twelve hours from the onset of the disease (membrane formation) the patient with proper treatment will recover.

If you begin treatment twelve to eighteen hours from the onset of the disease you may expect to lose a patient occasionally.

If you begin treatment from eighteen to twenty hours after the onset of the disease you may expect many fatal cases.

The disease is one which usually runs a rapid course; the patient dying in from four to six days, mostly. I have seen cases perish in forty-eight hours where no treatment had been given.

This being the case, it is evident that to accomplish anything satisfactory the treatment must be prompt and thorough; the patient must have the same attention night and day, until you have the disease thoroughly under control.

I rely upon the following plan of treatment (having tried many other modes and abandoned them because not reliable): pure air, of proper temperature; quinine and iron, in form of elixir, in tablespoonful doses every two hours for an adult; proper nourishment—extract of beef, milk, eggs, good port or sherry wine.

Locally, internally, tincture of iron with glycerine, in the proportion of two parts of the former to one of the latter, and this mixture saturated with chlorate of potass.; this should be thoroughly and carefully applied, every six hours, to the fauces, tonsils, etc., by the physician, and never entrusted to inexperienced persons. A gargle consisting of one part of the above mixture and three parts of water should be used every two or three honrs. Small pieces of ice may also be allowed to dissolve in the mouth to good advantage when not annoying to the patient.

Locally, externally, nothing, except where there is swelling of the lymphatics; then the application of lin. ammon.

If the above plan of treatment is faithfully carried out I know that the mortality of this much dreaded disease will be very much lessened. A single example of the importance of early and thorough treatment.

No one of experience will probably deny, all things being equal, that children will perish from the disease more frequently than adults.

A family of ten persons, father, mother, four children between the ages of six and twelve years, and four (three sons and one daughter), between the ages of seventeen and twenty-five, all but the father contracted the disease. I was called in consultation when all had contracted the disease. The mother, adult daughter and two adult sons had already died, and one other son

was in a dying condition (all happening within a period of two weeks); the children, four in number, under twelve, though having the same type of disease to contend with, all recovered. The treatment adopted was the same for children and adults, and in the main such as here suggested. Why did the adults die and the children recover? Because the adults refused to have any treatment until the disease had far advanced, and the children were forced to treatment early.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY GEORGE H. FOX, M.D.,

Professor of Dermatology.

Pediculi.

Gentlemen:—To-day we will continue the subject of animal parasites which cause disturbance of the skin in man. There are three kinds of the pediculus: the pediculus capitis, or head-louse, the pediculus pubis, or crab-louse, and the pediculus vestimenti, clothes or body-louse. These pediculi produce three forms of phthiriasis: phthiriasis capitis, phthiriasis pubis, and phthiriasis corporis.

These pediculi resemble each other in their anatomical structure and in their general appearance, to a very great extent, and it is singular there should be such a contrast between the affections which the three species cause. Why it is that one louse should inhabit only the scalp or hairy portion of the head, why another should infest all the hairy portions of the body except the scalp, and why still another should harbor in the clothing entirely, being found only in the seams and folds of the garments, and never among the hairs of any portion of the body, is a question very difficult indeed, and impossible, I may say, to answer.

Now, the treatment of any of these forms of phthiriasis is merely local. The old idea of the disease being a specific dyscrasia was long ago exploded, but still there are very many among the lower classes who believe now that the pediculi are bred by the disease; in other words, that they are the effect rather than the cause of the disease. You will find this idea firmly rooted in the minds of many of the less intelligent patients, so that it will often be almost impossible to get them to carry out the local measures prescribed until you talk with them for some time, persuading them that their blood is not disordered, calling for internal treatment, but that the trouble is caused altogether by the lice upon the skin or in the clothing, and that local remedies, if efficiently applied, will be sufficient to effect a cure.

It is convenient to discuss these three forms of phthiriasis separately. Take first the phthiriasis capitis, which is very common. It is an affection which occurs very largely among the children of the poor, but from them is very frequently transferred, either directly or indirectly, to the children of the rich. Adults, of course, are not exempt from it, and women, on account of their long hair, are more likely to get it than men.

When the insects get into the hair they proceed to deposit their ova upon the hair of various portions of the scalp, usually in the temporal region, and usually near the scalp itself, from which they draw their sustenance. These nits are little pyriform bodies adherent to the hair, the small extremity always pointing toward the scalp. Three, four or a dozen or more may be deposited upon a single hair, and always near the scalp; therefore, when you look at any case of phthiriasis capitis and find that these nits are removed some distance from the scalp, you may know at once that the disease has existed for some time, the gradual growth of the hair accounting for the distance of the nits from the scalp.

These nits hatch out in a very few days, and give rise to a certain amount of itching, which generally leads to a diagnosis of the trouble, either by the patient or by the friends, the mother, or the nurse. If the patient be a child, they will notice that the child is scratching the head more than usual, and on examination they will find one or more of these nits upon the hair, usually, as said, upon the hair of the temporal region. Sometimes it is rather difficult to say, unless there be rather a strong light, whether a little excrescence, one or more, upon a hair are really ova, or whether they are little shreds of epithelium, which is sometimes adherent. If the hair, however, is removed and examined with a strong light, this peculiar pyriform shape of the nit will be at once apparent, and the diagnosis can be readily made. When the disease has existed for a long time, in children who have been neglected, or in adults, as I have often seen it, you will find that the hair appears as though it had been covered with some rough or coarse white powder, each individual film being studded with these ova.

As regards the treatment, I have said that the treatment of all of the forms of phthiriasis should consist simply in the application of local remedies. At the same time, I must say that there are some writers who believe that there is a certain predisposition, or a certain condition of the skin which predisposes, to attacks of the pediculi, and I must admit that there are very many children who seem to catch lice upon the slightest provocation. In a family of a number of children, when exposed, one or two will get lice and others will escape; but this I think must be due to the readiness on the part of some of the children to associate with every description of playmates, whereas the others hold themselves more aloof. Certain persons troubled with this affection care nothing about cleanliness, and only resort to it when their itching becomes so intense that life is a burden to them. Now, if any person in perfect health should subject themselves to the same causes as these persons do, we would undoubtedly find that they would be just as lousy. In other words, the condition of the patient's health has nothing whatever to do with the existence and the persistence of these pediculi. I must say, however, that many writers have recorded cases of phthiriasis where the disease

could not be cured by local treatment until the patient had been given cod-liver oil or some internal remedy, which has. they say, seemed to change the condition of the system, and along with it the condition of the skin, so that the insect could be destroyed. Notably among these, is Hebra. This, however, I think is a mistake. McCall Anderson, a most excellent writer on dermatology, I know, speaks of some cases of phthiriasis corporis, or body lice, occurring in broken down subjects, where a cure could be greatly accelerated by the administration of cod-liver oil, etc. So far as my experience goes, the ordinary local treatment will cure phthiriasis long before cod-liver oil, etc., would begin to have any effect whatever.

Now we will suppose that we have one or two cases of phthiriasis capitis to treat. We will find that the treatment depends greatly upon the social condition of the patient, and largely upon the chronicity of the disease and the number of the pediculi and ova present. In private practice the disease is generally discovered soon after the pediculi have found lodgment upon the scalp, and when there is a very slight amount of irritation. It will be difficult to tell, in some cases, whether the child is really suffering from the pediculi, for you will often be unable to find the insect until you have examined one or two hairs in a very strong light. Having found one or two nits, however, the diagnosis is made.

Now, in such a case, what is the best plan to pursue? I have had occasion to treat the disease in my own family. I do not know but what I brought the lice home myself, for I have brought pediculi home upon my clothing, from the dispensary, repeatedly, and the treatment I have adopted in private practice has been to rub in a very little of the white precipitate ointment. In the milder cases that rarely fails to effect a cure in a few days. A number of remedies have been recommended, but as I have found the white precipitate ointment, full strength, rubbed, not in the scalp, but throughout the hair, will effect a cure in a few days, it is not necessary to consume time in naming the various remedies which may have been proposed. But there may be some objection to using this ointment on the hair, especially because of matting the hair together. If you want a more elegant preparation, use a one per cent. solution of corrosive sublimate, either in alcohol, water, or Cologne water. Another prescription may be used, as follows:—

℞.	Hydrarg. chlor. corros.,	1	
	Thymol,	4	
	Alcohol,	100	
	Ol. amygdal. ama.,	q. s.	M.

The mercurial solution alone is sufficient to kill the pediculi, and in the milder cases there is no danger from the absorption of the drug. If there has been very much laceration of the scalp, from the scratching, or if there are any spots of eczema present, of course it would be unsafe to use a strong solution of corrosive sublimate, or, in fact, to use corrosive sublimate at all. The alcohol is also a parasiticide, and gives a peculiar odor to this lotion which is not pleasant to the pediculi, and the thymol or the Cologne water, if you wish to use it, tends to loosen the ova from the hairs. Very often a solution is used which kills the pediculi but does not kill the ova, in which case, in a few days, a fresh colony of the insects is present. The oil of bitter almonds added to the mixture counteracts the peculiar odor of the alcohol and gives a more pleasant fragrance. Where you wish the effect of corrosive sublimate upon the skin you will find this a very pleasant lotion to use. As I say, it can be used with impunity provided it is applied to the unbroken epidermis. If you use it upon the face or scalp of a child suffering from moist eczema, I would not undertake to be responsible for the consequences. I have written this prescription in the decimal system. I do not care whether you use grams or drachms, or what not, but the decimal system is as much superior to the system in vogue as the decimal system of money is superior to the sovereigns, crowns, etc., of the English. I am in favor of changing the system, not for the sake of making a change, but simply because the decimal is much more convenient. A good plan would, I think, be to give up using grains, scruples, ounces, etc., and use simply the drachm as a unit, instead of the gram, and make your prescription a decimal one. No matter, in fact, what unit you use, as a hundred drachms, fifty drachms, etc, by making every prescription amount to one or more hundred parts, or some decimal portion of one hundred, you can see at a glance the percentage of each ingredient.

The pediculus pubis looks like a crab, and consequently we have the common name, crab-louse. The same treatment which will remove the pediculi from the hair will also remove the pediculis pubis. Ordinarily we find the phthiriasis pubis affecting simply the pubic region; but you must bear in mind, strange as it may seem, that you will sometimes find this pediculus in the axilla, sometimes in the eyebrow and upon the eyelashes; I believe some cases have been reported in which it was found on the scalp, but if it be so it is extremely rare. I have never seen such a case myself.

The ointment which is ordinarily used in the treatment is the blue ointment, or ordinary mercurial ointment of the Pharmacopœia. There is no doubt about its being an efficient remedy, but the majority of patients will use so much of it, and rub it in so hard, that about one-third of the cases, at least in dispensary practice, will be found next day with a severe eczema of the scrotum, etc. That is too much of a good thing. The ointment of ammoniated mercury is far more cleanly. Or you can use the lotion of corrosive sublimate which I have just given you.

Phthiriasis corporis, or pediculi which infest the clothing, look very much like the pediculi which infest the scalp, but larger. Although you may find them on the skin after the clothes have been removed, you must bear in mind that these insects do not infest the skin, but live in the seams and folds of the clothing, and merely come upon the skin to pasture, as it were, to insert their little probes and draw the blood from the superficial vessels.

Now, the eruption which the pediculi in the clothing make is a peculiar one, and is due wholly to the scratch mark. If a person were paralyzed, or confined with a strait jacket, you

would not find the peculiar eruption in phthiriasis corporis, nor would you find it, for that matter, in scabies. It has been repeatedly noticed in insane asylums and hospitals, where persons have contracted scabies and could not use their nails in scratching, that the ordinary eruption was not present.

We make the diagnosis of this affection in two ways: First, by finding the lice upon the clothing, which is not difficult where they are numerous; and second, by noting the peculiar location of the eruption, which consists only in scratch marks. There is one peculiarity about these scratch marks of phthiriasis which does not occur in scabies and other affections of the skin, and that is that they are very long and very little. In other words, there is no other affection of the skin in which the pruritus is so intense as in the affection spoken of. In scabies, in urticaria, and other affections of the skin you will often find the skin torn and bleeding, but you will never find the patient taking four or five nails of one hand and drawing them across the skin and leaving bleeding marks, as you find in phthiriasis corporis. In scabies the eruption depends largely upon the character of the clothing; so in phthiriasis we find the scratch mark, in the first place, most abundant across the shoulders, and from this fact alone the diagnosis may often be made. In the second place, we find a ring or girdle of excoriations around the loins, upon the hips and outer surface of the thighs. Why is this? Simply because across the shoulders we have the shirt occurring in folds, and these folds give harbor to the pediculi. Around the waist, where the clothes are tied tight, being brought closely in apposition with the skin, as is often the case with workingmen, we find the pediculi; and, consequently, intense itching will occur in these regions, and, of course, the patient will scratch where he itches most. I remember a very peculiar case at the New York Dispensary some years ago, where the patient had stripes of excoriations upon the outer side of the thighs and legs, and also upon the inner side of the thigh not quite so marked. On the anterior and posterior aspect of the thigh he was almost entirely free from the eruption. Now, this peculiarity struck my view at once, and I was at a loss to know what caused it, until one of the students who was present suggested looking at the patient's pants. It was simply because the seams of the pants were almost white with the ova of the pediculus, and, of course, the irritation had occurred just in the line of the seams.

If you take all the clothing of the patient, not only those which he is wearing at present, but those which he has been wearing, and throw them away, and put him into a clean bed in a hospital, the disease itself is cured. It may take several weeks to cure the secondary eczema which may be present, or even perfectly to heal the excoriations of the skin, but the cause of the trouble is removed as soon as you get rid of the infected clothing, and that is the first thing to do, except, as I have said before, to convince the patient that he has lice. Many will deny it. In private practice it often requires a great deal of delicate tact to tell the patient that the trouble is not due to the blood, but to infection of the clothing by lice. It may be in persons who are very nice about their toilet, the last persons in the world that you would suspect giving harbor to the pediculi; but such cases do occur. I have had them a number of times. It is very easy to get pediculi upon the clothing in public practice; it is almost impossible, however, to contract scabies. I have handled the hands of scabies patients by the half hour or hour, and never had any fear whatever of contracting the disease. At the dispensary, and at clinics, and in the street cars the pediculi are very apt to move from the clothes of one affected to your own.

Now, in those cases where there are only one or two pediculi to be found, or perhaps, none at all, but merely the peculiar marks upon the skin which you recognize as being caused by this affection, the only thing to do is to explain to the patient just what the cause of it is, and advise that the underclothing, and the outer as well as the under, if he wear woolen clothing, be baked in a very hot oven. They can be rolled up in a newspaper and put upon a board and baked in an oven where the temperature is at least 150 or 200 degrees, or more. This will kill the insect and the ova as well. In dispensary practice, where we find not only pediculi present in large number, but this lacerated or excoriated condition of the skin, we not only advise the patient to bake his clothing or buy new, but we have to do something to remove the effects of the skin scratching. For this I have generally advised, for public practice, a tolerably strong lotion of carbolic acid, perhaps thirty grains to the ounce. An infusion of larkspur seed may be used, or ointment. The ointment is largely used in Germany and England, and to a slight extent in this country. Another remedy may be used in connection with phthiriasis capitis, to lessen the itching of the skin and prevent the pediculi from getting access to the body, that is, petroleum.

In severe and neglected cases of pediculus capitis in children, it is a good plan to advise the use of petroleum, a remedy which they usually have in the house, and saves the expense of getting the bichloride solution. I tell the patient usually to anoint the head thoroughly with oil at night, not to rub it in near the gas jet or lamp, through fear the patient may take fire. If there is very much eczema present the oil will cause considerable smarting, and it might be well, in some cases where there is considerable eczema, to treat first before we begin to remove the pediculi, or simply to use the white precipitate ointment in the hair. But if there is not much eczema of the scalp, we can tell the patient to rub the oil thoroughly into the hair and put on an oiled silk cap, or other suitable cap, and sleep in it over night. In the morning the scalp can be washed thoroughly with soap and water, and the disease will be partly cured. It is necessary, however, in some cases, to repeat this night after night, for three or four days. There is, perhaps, no more efficacious remedy than the petroleum thus used. In pediculus corporis, you can tell the patient to do the same thing, keep the skin greased with the oil; the odor, it seems, prevents pediculi from going to the skin. Where they go to may be a mystery, but soon they will be found in much fewer numbers in the clothing.

Editorial Department.

Periscope.

Excision of Pylorus, for Cancer.

In the *British Medical Journal*, Dr. F. A. Southam reports the following instructive case, which, from its great practical value, deserves a full notice:—

Richard S., aged 43, gas-fitter, was admitted to the Manchester Royal Infirmary, under the care of Dr. Ross, on March 13th, 1882, suffering from symptoms of pyloric obstruction, which had first shown themselves about four months previously. The patient, who was much emaciated and was rapidly losing flesh, was, at the time of admission, unable to retain any solid food, as sickness always came on about an hour after a meal, the vomited matter being at times mixed with a little blood. Fluids, however, if taken in small quantities, were retained by the stomach. The bowels were very constipated, only acting about once a week, and the motions were dark and tarry. The patient complained of considerable pain in the region of the stomach, always increased after taking solid food. On examination of the abdomen, as the patient lay on his back, a hard, well defined, somewhat nodular mass, apparently about the size of an orange, could be distinctly felt close to and a little to the right of the umbilicus, corresponding in situation with the pyloric extremity of the stomach. The tumor, which was freely movable, shifted its position with the respiratory movements, and also with the position of the patient, falling to the right or left of the middle line, according as he turned to either side. On making pressure over it considerable pain was felt. No dilatation of the stomach could be detected, and the condition of the other viscera appeared to be perfectly normal. From the history and the symptoms which were present, Dr. Ross had little difficulty in diagnosing the case as one of cancer of the stomach; and as, from the mobility of the mass and the fact that it was perfectly free from any connection with the abdominal walls and adjacent organs, the disease appeared to be limited to the pylorus, the case was considered a suitable one for operative interference.

As he was very rapidly losing ground, growing daily more emaciated, preparations were made for performing the operation on April 5th. In order that the bowels might be thoroughly cleared out, simple enemata were administered the two preceding evenings, and brought away a large quantity of dark-colored feculent matter. No food was given by the mouth for twelve hours previously.

The operation was performed at 10.30 A.M. on April 5th, according to the method adopted by Professors Billroth and Dr. Wolfler (*Clinical Surgery*, by Dr. Billroth; New Sydenham Society, p. 493), with antiseptic precautions. To guard, as far as possible, against the effects of shock, the patient's extremities were carefully wrapped up in blankets, and hot bottles were kept applied to the soles of the feet and sides of the thighs and legs. As soon as the patient was fully anæsthetized, a siphon stomach-pump was passed, and the interior of the stomach was several times thoroughly washed out with tepid water. The necessity of this measure was proved by the fact that a large quantity of dark-colored, grumous matter was brought away, which otherwise would probably have escaped into the peritoneal cavity when the viscus was opened.

The operation itself may be divided into five stages.

1. *Exposure of the Tumor.*—This was effected by a transverse incision, nearly six inches in length, carried across the abdomen about two inches above the umbilicus, and dividing the recti muscles. All bleeding having been arrested, the peritoneum was divided to the same extent, and the growth was then freely exposed to view. (Fig. 1.) It was found, as was expected, limited to the pyloric extremity and adjacent portion of the walls of the stomach, being perfectly free and movable, except at its posterior aspect, where there were a few slight adhesions to some enlarged lymphatic glands which lay close to the head of the pancreas. These having been readily broken down with the finger, the pylorus and diseased mass were drawn forward as far as possible, so as partially to protrude through the abdominal incision.

2. *Isolation of the Pylorus and Tumor from the Large and Small Omenta.*—The tumor having been drawn forward as far as its connections allowed, the great omentum was first separated from the greater curvature of the stomach, by taking it up in three portions, between three double catgut ligatures, and then dividing it between each pair of ligatures with scissors. The small omentum was then separated from the lesser curvature in a similar manner, five double ligatures being used. In this way, the pylorus and diseased mass were completely freed from their connections with both omenta, without any hemorrhage; and being quite isolated, the tumor could now be drawn forward through the external wound, so as to lie altogether outside the abdominal cavity. This having been done, a large, flat sponge was laid beneath the stomach, so as to cover in the greater portion of the wound, and in this way prevent any prolapse of the intestines, and the escape of any blood, or of the contents of the stomach and bowel, after their division, into the interior of the abdomen. By this means, the remainder of the operation was performed altogether outside the peritoneal cavity.

3. *Excision of the Pylorus and Tumor.*—This was effected in the following manner. A thick silk ligature was tied around the duodenum, about an inch and a half from the pylorus, so as to prevent any extravasation of its contents from taking place after its division, and also to guard against its slipping away after its separation from the stomach. The duodenum was then divided with a pair of scissors between the ligature and the pylorus, about half an inch from the tumor and well clear of the disease. The distal por-

tion, with the ligature round it, was then drawn over to the right side, while the stomach itself was divided. This was again effected with scissors, the division being commenced about the centre of the lesser curvature, and carried obliquely across toward the great curvature, in a line slightly convex toward the left side. (Fig. 1.) In this way, the pylorus, along with the tumor, was completely removed. The contents of the stomach, which was almost empty, were soaked up with a sponge; and its interior was carefully washed out with a weak carbolic lotion. Contrary to what one would have expected, the division of the stomach was attended by very little hemorrhage, only two small vessels on its anterior wall requiring torsion—the result, no doubt, of the powerful contraction of its muscular coat. Nor was the division of the bowel accompanied by any bleeding, the pressure of the ligature round it probably preventing any hemorrhage. After the removal of the tumor, a mass of enlarged glands surrounding the head of the pancreas was freely exposed to view. Some

Fig. 1.—Shows position of growth, *x*, and lines of division, *a a*, of stomach, *b b*, of duodenum.

of these were removed; but, as they were found to involve the biliary and pancreatic ducts, it was thought advisable not to interfere too much with them, for fear of injuring those important structures.

4. *Closure of the Opening in the Stomach, and the Insertion of the Duodenum into it.*—The opening in the stomach was next partially closed by twenty-one silk sutures, commencing from above downward, *i. e.*, beginning at the lesser curvature, a small opening being left at the great curvature for the insertion of the duodenum. The silk ligature was then removed from around the duodenum, and the orifice of the bowel was attached to the opening which had been left in the stomach at its greater curvature by means of nineteen silk sutures (Fig. 2). The sutures having been cut short and the sponge

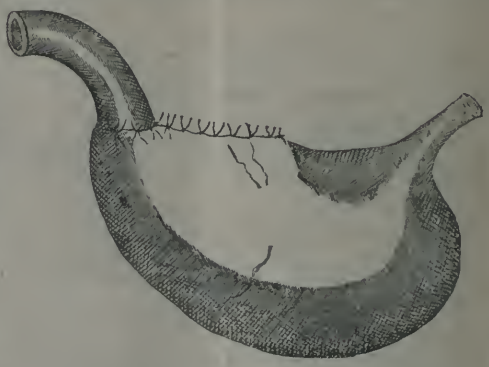
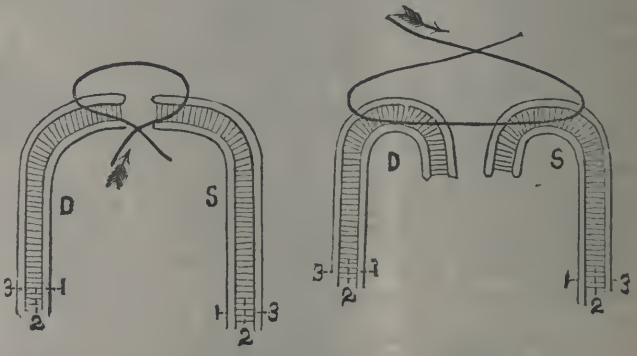


Fig. 2.—Shows condition of part after removal, of growth and attachment of duodenum to stomach.

removed, the stomach was returned into the cavity of the abdomen; all bleeding points were arrested, and the peritoneal cavity was then carefully sponged out.

In the insertion of the sutures two different methods were adopted, with the object in each case of bringing into contact with one another a considerable margin of the opposed serous surfaces of both stomach and intestine. In uniting the posterior walls of the duodenum and stomach, the sutures were inserted from within (according to the plan recommended by Billroth), the needle being introduced between the mucous and muscular coats of the stomach (s), and then made to pierce both muscular and serous coats; it was then passed in the reverse direction through the coats of the duodenum (d), viz., first through the serous and muscular coats, and then between the muscular and mucous coats. In this way, on drawing tight and tying the sutures, a considerable margin of the serous coats were brought into contact with each other, and the margins of the mucous membrane at the same time fell into apposition, covering over the knot of the sutures, which in this way was left



Figs. 3 and 4.—*s*, Stomach, *d*, Duodenum. 1, Mucous Membrane, 2, Muscular Coat, 3, Serous Coat. The dark line with the arrow shows the direction in which the sutures were passed.

between the mucous and muscular coats at the point of junction of the stomach and bowel (Fig. 3). In uniting the anterior walls of the duodenum (D) and stomach (S), and also the two cut surfaces of the stomach itself, a somewhat different method was adopted, the sutures being entered from without. The opposed margins of the cut surfaces were slightly inverted (Fig. 4), so as to bring the serous surfaces well into contact with each other; the needle was then introduced from without, so as to pierce in succession the serous, muscular, and serous coats of each opposed surface. After tying the sutures, the knot lay altogether external to the stomach and bowel, and at the same time their serous surfaces were brought well into apposition with each other.*

5. *Closure of the External Wound.*—This was effected in the ordinary way, by means of nine silver wire and sixteen silk sutures, passed so as to include the peritoneum. Considerable difficulty was, however, experienced in bringing the margins of the wound into contact with one another, owing, no doubt, to the contraction of the divided recti muscles, and I think, therefore, that on this account a longitudinal incision through the abdominal walls would be preferable to the transverse one as recommended by Billroth. The wound was then dressed antiseptically, and as I regretted afterward, no drainage tubes were employed. The patient was then removed to bed, the operation having lasted exactly one hour and a half. No sickness occurred during its performance, and a very fair pulse was maintained throughout.

Nutrient enemata and subcutaneous injections of morphia were administered every four hours. At 1 P.M. (one hour after the conclusion of the operation), pulse 88, full and strong; temperature 97.6°. The patient was sleeping quietly. There was no sickness. The extremities of the skin were warm. At 5 P.M., temperature 98.4°; pulse 120. He was quite conscious, and complained of thirst and pain about the abdomen. He appeared to have quite rallied from the shock of the operation. At 10.30 P.M. temperature 99 8°; pulse 138, soft but regular. The patient was sleeping quietly; the extremities and surfaces of the body were warm. At 12.30 A.M. temperature 102°. He had been sleeping quietly for some hours. There had been no sickness since the operation. Shortly after this, the night nurse noticed a change come over the patient, and death took place very suddenly, about 1.30 A.M., nearly fourteen hours after the conclusion of the operation.

A Post mortem Examination was made the following day. The internal organs were all perfectly healthy. No secondary deposits were present, except in the mass of glands to which reference has been made as surrounding the head of the pancreas. There was slight injection of the parts in the neighborhood of the stomach, and a quantity of bloody serous fluid was found in the peritoneal cavity. As regards the parts which had been divided, a certain amount of union had already taken place, a thin layer of lymph having been poured out, as the result of which there was slight adhesion between the opposed serous surfaces of the stomach itself, and also between those of the stomach and the duodenum. The whole of the growth had been removed, the portion of the stomach which had been left, and the bowel itself, beyond the point at which it had been divided, being found perfectly free from any trace of the disease. *Microscopic Examination* of the parts removed at the time of the operation (*i. e.* the pylorus, and about one-third of the anterior and posterior walls of the pyloric extremity of the stomach) showed that the growth consisted of scirrhous cancer. The pylorus was entirely surrounded by the growth, its opening being so contracted as barely to admit the tip of the finger. The pyloric extremity of the stomach was also involved, more especially its anterior wall, the mucous surface of which was studded with a number of distinct nodules. The duodenum was similarly affected for about half an inch; beyond this point the walls of the bowel were perfectly healthy.

Remarks.—With regard to the cause of death, I suppose it must be referred to what is generally included under the term shock; but inasmuch as reaction had become fairly established, the patient appearing to have quite rallied from the effects of the operation, and since death was preceded by a sudden and rapid rise of temperature, may not the fatal result in this, as in many other cases of abdominal surgery, be possibly due to what has recently been described as "septic collapse," or "septic intoxication," that is to say, pure chemical poisoning, from the sudden absorption of a large quantity of poisonous material by the extensive absorbing surface of the peritoneum?

From the nature of the operation, involving as it does the division of the stomach and intestine, it is not possible to keep the parts involved perfectly aseptic; and even if it were, from the physiological law of osmosis, it is not improbable that the fluid which is poured out into the peritoneal cavity soon becomes infected by the formed ferments which are present in the alimentary canal, and which may make their way into it through the walls of the intestine. Hence a septic peritonitis is liable to be set up, which may destroy life in a few hours, from a very acute form of blood-poisoning.

The rapid rise of temperature just before death, the sudden collapse after reaction had become established, and the presence of a quantity of sanious fluid in the cavity of the peritoneum are, I think, arguments in favor of the correctness of this theory.

For these reasons I should, if called upon to perform the operation again, be disposed to introduce one or more drainage tubes into the abdominal cavity through the external wound, or through a counter-opening made in the loin, and attempt to draw off from time to time, by means of a syringe, any inflammatory effusion which might collect.

* The second row of sutures, passed so as to include only the cut margins of the mucous membrane (as recommended by Billroth), were not employed, as they seemed unnecessary, the two mucous surfaces falling accurately into apposition with one another without. Silk sutures were used in preference to catgut, as the latter, if acted upon by the gastric juice, might have softened and given way before union could have taken place.

Gunshot Wound of Brain.

The *Lancet* records the following wonderful case: On June 14th, a young gentleman, nineteen years of age, was found lying on the ground near Torquay, with a pistol wound in the head. He was taken to the Torbay Hospital, and from information kindly afforded us we are able to state the nature of his injuries. There was a wound in the right temporal region, perforating the skull and the dura mater, and permitting the escape of brain matter. There was also extensive comminution of bone in the left parietal region, from internal impact of the bullet, but here there was no external wound. When found the lad was conscious, and all symptoms of shock and concussion soon passed off. On the fifth day left facial and lingual paralysis was noticed; no other paralysis or any alteration in sensibility has since developed itself. The temperature has been within the normal range, except a single rise to 102°, on the third day, and the pulse has been regular throughout, only ranging from 60 to 68. The lad eats and drinks well, and his intellectual faculties are good. The wound is granulating, and up to the 5th inst. no fresh symptom had arisen. The bullet is conical, one-third of an inch in diameter, and it remains lodged in the cranium. According to Dr. Ferrier's experiments, the injury to the convolutions is localized in and near the ascending and middle frontal convolutions. This case has been mentioned in the lay press, where it has been erroneously stated that a considerable part of the frontal bone with brain matter attached had been shot away, and great surprise has been expressed at the boy's living after such an injury. The case is very interesting and remarkable, but by no means unique. Larrey drew attention to the fact that bullets may remain encysted in the brain for years without producing symptoms. In the surgical history of the American war many cases of recovery—some partial, some complete—after perforation of the brain by bullets, and after comminuted fractures with destruction of brain matter, are recorded. In the Franco-German war other similar experiences were met with, and Dr. Gilbert Smith has related the case of a man who recovered from a sabre-cut received in the first Carlist war. The wound was followed by hernia of the brain, and the man was seen alive and well several years afterwards, with a large cavity within the skull, and an opening in the bone. His faculties were unimpaired, as shown by the fact that he was engaged in his business of a photographer. It is a well known fact that injuries to the anterior part of the brain are less serious than similar injuries inflicted further back.

—The culture of cinchona in India began in the year 1858; especially cinchona succirubra, as also cinchona calisaya, were planted, while cinchona officinalis did not seem to prosper so well in that climate. There are now in India 4,677,720 China trees; 4,034,535 are cinchona rubra; 412,695 cinchona calisaya; 199,893 a variety of the latter, and 30,592 other kinds. Last year 9296 pounds cortex were brought into commerce.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the First Quarterly Report of the Eye and Ear Dispensary of Starling Medical College, of Columbus, Ohio.

——West Virginia has never aspired to a leading position among the States of the Union, yet the Report of the Transactions of its Medical Society, which lies before us, affords ample evidence that this good State has thoroughly held its own from a professional point of view. A complete index makes easily accessible all the really good material in this volume.

——The Report of the Transactions of the Medical and Chirurgical Faculty of Maryland, at its eighty-fourth annual session, contains very much of interest. The Report of the Section on Sanitary Science contains an account of the yellow fever epidemic of 1855, the ravages of which did so much to arouse the slumbering people to a sense of their danger, which resulted in a Convention in Philadelphia in 1857, Baltimore, 1858, New York, 1859, and Boston, 1860, to discuss anew the subject of quarantine and sanitary regulations. Dr. Van Bibber contributes a valuable article on the "Drinking Waters of Maryland," illustrated by a map. Anatomy, surgery, practice of medicine, obstetrics, physiology, all the branches of our science, indeed, are represented in these Transactions, which are well worthy of careful reading.

——Dr. Charles A. Oliver has recently been making some experiments on the comparative action of sulphate of daturia and of sulphate of hyoscyamia upon the iris and ciliary muscle, which we receive as a reprint from the *American Journal of Medical Sciences*, July, 1882. Hyoscyamia will sometimes produce such grave constitutional disturbance that we must be cautious in its use. The astringent and irritant action of the two drugs upon the conjunctiva may be avoided by the use of a neutral salt. The long-continued dilatation of the pupil, and the slow return of the ciliary power occasioned by the amounts given of both the drugs, render them absolutely useless when we desire accurate ophthalmoscopic examination in cases dependent upon their use. Such are a few of the results of these observations, for an intelligent comprehension of which it would be necessary to peruse the pamphlet.

THE

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D. G. BRINTON, M.D., EDITOR.

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THE APPROPRIATION FOR THE PREVENTION OF EPIDEMICS.

There has been a good deal of hard feeling about that $100,000 appropriation for the prevention of epidemics. The National Board of Health expected it and did not get it, and in consequence have had to cut down their organization and suspend their *Bulletin*.

The clause of the Appropriation bill ran thus:—

"The President of the United States is hereby authorized, in case of a threatened or actual epidemic, to use a sum not exceeding one hundred thousand dollars, out of any money in the Treasury not otherwise appropriated, in aid of State and local boards, or otherwise, in his discretion, in preventing and suppressing the spread of the same."

After considering the matter, the President decided to employ this contingent appropriation through the agency of the Treasury Department, and that, in case of a threatened or actual epidemic, immediate action should be taken, upon application from the Governor of a State addressed to the Secretary of the Treasury.

This meant that the spending of the money is to be through the United States Marine Hospital Service, a most excellent and efficient branch of our civil medical staff, of which, as most readers know, DR. JOHN B. HAMILTON is Surgeon General.

He has issued a circular to the officers of the corps, calling their attention to the following paragraph of its regulations:—

"Medical Officers and Acting Assistant Surgeons are, under the direction of the Supervising Surgeon General, required to observe and to aid in executing the quarantines and other restraints established by the health laws of any State, and to report forthwith to the said Surgeon General any important event or fact that may come to their knowledge bearing upon the importation, outbreak, or spread of cholera, yellow fever, smallpox, typhus, or other epidemic disease, at or near their respective stations."

This is all very well, and we do not doubt but that the interests of the public will be well cared for, and the money honestly and judiciously expended by the Marine Hospital Corps. It has proved itself a most useful and intelligent body, and a hundred thousand for it to expend is little enough.

But there were peculiar fields of investigation and research, of the very highest value to science and health, to the country and to humanity, in which the National Board of Health was working, which must now lie fallow. Its *Bulletin* was indispensable to the statistician, and its authority daily growing.

That this Congress prostituted $19,000,000 of the people's money to the iniquitous and fraudulent River and Harbor Improvement Steal, and not one cent to the National Board of Health, are two facts that should consign every member who voted for that measure to political and personal ignominy for the rest of his life. Such a body of legislators are as destructive of the moral as they are negligent of the physical health of the nation. The heavily taxed people are robbed of millions, and the pittance asked to guard against pestilence is refused. Not a single representative who aided in these two actions will ever have a second term, if his constituents are honorable and intelligent people.

It is the solemn duty of the voters of this country to demonstrate, by unmistakable action, to their recreant representatives that they heartily disapprove of their dishonest and foolish legislation.

SANITARY INSPECTORS.

The story has been told of the physician who met an undertaker on a warm day, in the early summer, before a street stand, on which was exposed for sale a variegated assortment of green and unripe fruit. They stopped, shook hands, glanced toward the stand, smiled, and with a look of gratification walked on, arm in arm, delighted with the prospects of active business which this view afforded them. We were forcibly reminded of this story a few days ago, when, passing one of these stands on a crowded thoroughfare, we noticed that the enterprising proprietor had selected from his stock an assortment of *rotten* bananas, peaches and apples, which he had placed on a board by themselves and labeled for sale at a price much below that asked for the ripe and wholesome fruit. Our first feeling was one of anger, which soon gave way to reflection, as we realized that this poor, ignorant man was probably unaware of the full extent of the injury he was tempting his fellow creatures to do themselves. We thought how good an act could be performed by some philanthropist whose purse is always open to benefit mankind, by purchasing this rotten and poisonous fruit from the vender, who would thereby be protected from a loss which had been caused through no fault of his; and taking it to the next corner, throw it all into the common sewer, thereby saving many of his fellow beings from the dangerous sufferings which the consumption of this rotten mass would almost inevitably produce, and the cheapness of which is a temptation well nigh irresistible to the ignorant and poorer classes of our population.

But philanthropists (noble men as they are) do not, as a rule, give much attention to these seemingly trivial matters to the uninitiated. Sitting in their offices they dispense their wealth with a lavish hand for the erection of hospitals and educational institutions, but these little matters they neglect, because, we believe, their attention has not been sufficiently called to them. We believe that a system of so-called sanitary inspection does exist in our city, and that some one has the authority to prohibit the sale of unwholesome fruit, but if such a law does exist, we must, perforce, from the unerring evidence of our senses, regard it as a dead letter; its observance, if it ever was observed, is a matter of history, dating so far back that no man's memory can recall it. We should awaken from this state of lethargy, of dangerous inactivity, and our philanthropists, who have time, means, and inclination, are the ones to inaugurate such a reform. We want a corps of sanitary inspectors, whose time shall be devoted to honestly inspecting the sanitary condition of the districts under their charge, and who shall be given the authority to order the removal or abatement of any nuisance that may exist and to enforce their orders.

In the instance of the rotten fruit referred to, they should be authorized to empty it into the common sewer. The tobacco merchant cannot sell ruined tobacco, because his customers are too sharp to buy it from him; if, then, the customers of the street fruit vender are too ignorant to discriminate between what they ought and what they ought not to eat, they should be protected by those wiser than themselves. This power to prevent the sale of, should apply equally to all articles commonly used for food. These inspectors should regularly visit and carefully inspect all provision shops and market houses in their districts, and condemn that which is unfit for use, and see that their condemnation is not disregarded. It will not do to leave this sanitary reform to professional politicians, for two reasons.

1st. They have not the requisite knowledge of sanitary science to enable them to efficiently carry out the reform.

2d. Professional politicians are, as a class, notoriously lazy, except at electioneering times, when they are full of activity, whisky and promises, the latter of which are forgotten as soon as the election is over. They would neglect such work as would be necessary to carry out this reform, because by so doing they would make enemies and lose votes in their districts.

This duty should be relegated to intelligent physicians who have made a special study of the science of hygiene. In our last issue we recommended the establishment of a corps of police surgeons. By combining the two duties, by making an intel-

ligent physician, who is also a sanitarian, the police surgeon and sanitary inspector of his district, and paying him a liberal salary, he could devote all his time to his dual duties, and they would both be efficiently carried out. There are plenty of physicians to fill these positions satisfactorily, and when such a reform becomes a reality, then, indeed, and not until then, will we have a city of the sanitary condition of which we can justly be proud.

MEDICAL EXPERTS.

This subject has been written upon, time and time again, and yet no progress has been made toward remedying the abuses that exist in the present manner of calling medical experts. To say that it is impossible to procure a fair and unbiased opinion on any intricate expert question, from a gentleman called and paid by one party to a litigation, seems like a slander upon the honesty and integrity of all experts. While this statement is eminently true, it is not really a slur upon the distinguished men who are sometimes summoned as experts, for the following evident reason: We are all human, and none of us perfect. It is almost impossible for the average man to help but have his mind influenced more or less toward the side who look to him for vindication, and from whom he is to receive the remuneration for his labor. Unconsciously to himself, his mind will be influenced in small details, and where there is room for doubt he will be very apt to give the benefit of the doubt to his own side. The abuses that are possible under the present system seem to be recognized by all, yet for some unaccountable reason there seems to be but little effort at reform. Again, the obstinately maintained differences of opinion expressed by the experts on either side, the one oftentimes diametrically opposed to the other, must have a tendency to place our noble profession in a ridiculous light before the unthinking public. This fact was well illustrated in a case recently tried in Scotland. A man injured on a railway brought suit against the company, and experts were called by either side. Their testimony was so conflicting that the judge, when addressing the jury, said that "the medical evidence was unsatisfactory, and left on the mind a distressing impression that the science of medicine was a science simply of guessing and experts. They had had doctors examined, who, with equal confidence and dogmatism, expressed contrary opinions upon the same condition of things, with no hesitation whatever; no scruple about expressing the clearest opinion of what was and what should be. The jury must therefore exercise their common sense, and throw overboard the medical opinions of those medical gentlemen, if they thought the greater part of it was guessing, and come to the facts." It is both unfortunate and unpleasant that such scathing censures should be passed upon our profession when we are not really the ones to blame. Every physician willingly admits that medicine is not an exact science, and that, therefore, differences of opinion on medical questions are not only natural but must be. But it is these public exhibitions of divergent views before those who, on account of the want of medical training, are unable to thoroughly appreciate why such differences should exist, that bring us, as a class, into so ridiculous a position. There is but one remedy for this morbid condition, and that has been pointed out and recommended by the American Medical Association. We must have legislation that will empower the court to call experts, denying absolutely this privilege to either side. Thus can the unbiased, uninfluenced and impartial expert calmly and scientifically render his evidence from an unprejudiced standpoint, and thus will the ends of justice be more efficiently served, and the dignity, respectability and honor of the medical profession be vindicated.

Notes and Comments.

Tertiary Syphilis in Childhood.

When syphilitic symptoms are observed in childhood toward the period of puberty, it always becomes a question to determine whether the symptoms are due to congenital or acquired syphilis.

Roussel, in a recent work, shows that Ricord in France and Henry Lee in England, admit that

hereditary syphilis may appear several months and even several years after the birth of the child. The opinion of Ricord regarding the transformation of syphilis into scrofula is well known; and Erasmus Wilson, Bœrensprung, E. Wagner and Veiel admit that hereditary syphilis leads sometimes to lupus, sometimes to scrofulous manifestations, an opinion which has been combated by Hebra, Virchow, and Kaposi.

As regards the period of infant life when the symptoms of hereditary syphilis appear, MM. Trousseau and Laségue, as early as 1847, combated the opinion of those authors who admitted that the manifestations of the constitutional malady might appear after several years; they assigned the seventh month as the extreme limit.

M. Roussel shows that hereditary syphilitic manifestations generally appear during the first, second or third month after birth, and is of opinion that in most of the reported cases of tardy hereditary syphilis the disease was contracted after birth. This may happen through direct contagion from another child, or from relatives, or from criminal attempts, and such cases are more frequent in the crowded tenement houses of large cities than is generally believed; the author gives a number of such cases. As regards the treatment of such cases, M. Roussel affirms that he has obtained excellent results from iodide of potassium, carrying the dose as far as 150–180 and even 210 grains per diem, for a child from 9 to 18 years of age.

Syphilis and Alcohol.

In a recent memoir published in *la France Médicale*, M. Barthélemy calls attention to the exceptional gravity of syphilitic skin eruptions in patients addicted to the habitual use or abuse of intoxicating liquors. The observations which he gives were all collected while the author was chef de clinique in Fournier's service, and relate exclusively to the waiter girls employed in "brasseries," who receive the name of "inviteuses," because it is their business to have as much liquor ordered as possible. In the pursuit of this métier, they are obliged to drink large quantities of intoxicating liquors; one of them absorbed in one day forty-two glasses of beer, five liqueurs and one "grog Americain;" this, of course, was an exceptional case; but most are continually drinking, in order to incite customers to order for them. When these girls contract syphilis, every symptom, even the primary chancre, is of gravity. In one case the eruption did not disappear from the cutaneous and mucous surfaces for ten years. The chancre in one case spread and became as large as a silver dollar, and was surrounded with an extremely indurated border, and notwithstanding treatment, the chancre lasted three months. In another case (Obs. III) the chancres were still present when a generalized papulo-hypertrophic eruption appeared over the whole body.

It was remarked also that secondary and tertiary eruptions appeared much more rapidly, were of greater intensity and of longer duration.

The moral is obvious; according to one of themselves, "almost all the 'filles de brasserie' are affected;" and the same is undoubtedly true of the waiter girls in the bar-rooms which disgrace our large cities.

Wire Ligatures for Divided Bones.

Dr. T. Sympson records two cases in the *British Medical Journal*, wherein he obtained excellent results in approximating divided bones with wire ligatures. The first case was a crushed foot; he amputated according to Pirogoff, and fastened the os calcis to the tibia by iron wires. The operation wound was completely healed in ten days, but the wires were left in six weeks. The second case was a resection of the knee joint. The femur and tibia were brought firmly together by two iron wires, one on the outer, the other on the inner aspect; a most complete union was obtained. The operations were performed under antiseptic precautions, and the wire caused no irritation. It is desirable that the apertures made by the drill should be at least a quarter of an inch from the sawn surfaces, and that these surfaces should be very accurately approximated by twisting together the ends of the wires; not more than twice, however, otherwise difficulty will be experienced in removing them. Iron wire, such as that used for the stilets of elastic gum catheters, in size about No. 22 of the gauge, will usually be found the best.

New Treatment of Irreducible Hernias.

In the *Gaz. des Hôp.* (March 25, '82) Dr. Phil. de Saint-Maudé recommends the treatment of irreducible hernias with the hypodermic injection of muriate of morphia. Already, in the year 1877, Phillippe reported three cases, in which, after repeated and fruitless endeavors to induce taxis, the reposition of the hernia became possible on the hypodermic injection of the remedy mentioned. Phil.'s pupil, Boussenot, has now published an article in which he reports five new cases. In all of them reposition became pos-

sible after five to six drops of a two per cent. solution—repeated every fifteen minutes till success was complete—had been injected under the skin over the hernia. These were all cases in which all previous attempts at taxis had been useless, and in two of the cases symptoms of strangulation had already made their appearance.

As there cannot be any possible danger connected with these hypodermic injections, if performed with the usual care, it would be well to try them in all such cases, before proceeding to an operation which, under the most favorable circumstances, will always be attended with more risk than a successful taxis. The question in our mind is only this, if it would not be far better, after *one* fruitless attempt at taxis, to have recourse immediately to the hypodermic injection of morphia, instead of making repeated useless trials, which can only make the later success more doubtful, and irritate the parts more than seems necessary.

Application to Corns.

A correspondent complains that he has not been able to employ Dr. Traill Green's mixture for corns, recommended in the REPORTER, July 8, as it became solid, and could not be applied with a brush. His letter having been referred to Dr. Green, the latter writes:—

"I have never heard a patient say that it cannot be applied with a camel's hair pencil. If the bottle is not kept closed the collodion loses its ether, and the mixture loses its fluidity. The specimen referred to above has been standing for several weeks, and has lost none of its fluidity, and can be applied with a soft brush with perfect ease. I am surprised that any one should have any difficulty in preparing or using it. If I had discovered any special treatment in its preparation I would have stated it. If any one has not succeeded there must be an error in weight or something wrong in the materials. If any find their mixture wanting in fluidity more collodion than the quantity named will give it that property, but I have not had occasion to use more."

Dr. Green forwards us a bottle of it, and it is certainly fluid, and could readily be applied with a brush.

Heat and Health.

A respected New York physician writes us in quite severe terms, about our editorials on the relations of heat to life. He claims that the heavy July mortality was owing *directly* to heat. But he adds:—

"Esculents suffer a speedy decay, for lack of moisture, by the fierce rays of the summer's sun. This extreme favors and hastens fermentation and decomposition, putrefaction fills the air with the effluvia of sewers, cesspools, and drains, which man cannot endure with safety to life."

This, however, is just the point we make—that it is largely the *indirect* effects of the heat, as those he here mentions, which increase the death rate. For a New Yorker, he takes a rose-colored view of his city. Thus he writes:—

"Milk is cheap, excellent, and abundant here."

We recommend to him a little closer study of the sanitary statistics of his own city. Here is an extract from a New York letter of August 19th, in a Philadelphia paper:—

"Dr. E. H. Bartley, chemist of the Brooklyn Health Department, has rendered a report of his analysis of milk from swill-fed cows, and he says that the milk is of such a dangerous character that it should be strictly kept from the market. The report also cites two instances where children fed upon such milk died from its effect."

It is notorious that thousands of gallons of swill milk are sold in New York city every day.

Boiled Milk in Summer Complaints.

Dr. H. V. Sweringen writes to the Cincinnati *Lancet and Clinic*, emphatically condemning the advice, so often given, to boil the milk administered to children suffering from summer complaints. He objects to this procedure because boiling will coagulate the albumen, thus rendering it very difficult of digestion. He is right. *Boiled* milk is utterly unfit for children; but since the majority of children will refuse milk when it comes cold out of the refrigerator, it will be well to place the cup or bottle containing the milk into a pan of warm water for a few minutes; this will remove the chill, without coagulating the albumen.

Sanitary Inspection of Schools.

It is well remarked by the *Public Ledger*, of this city, in view of a proposed step in advance in public hygiene, that at any rate one item estimated for by the Board of Health should be allowed by Councils. This is the $6000 asked for sanitary inspection of the public schools by educated physicians. It is not to be supposed that such inspection is required only to ensure proper ventilation, heating, cleanliness of the buildings, etc., but it is also to protect the school children from scarlet fever, diphtheria, varioloid, smallpox and other contagious diseases. No estimate yet proposed by any department can be put to better use. The Belgian city of Brussels sets Philadelphia a good example in this matter.

Special Reports.

NO. X.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.

A Case of Quinine Amaurosis Manifesting Itself Primarily in One Eye. *Arch. Oph. Vol.* XI, *No.* 1.

C. M. Hobby, M.D., Iowa City, Iowa, reports the case of a young lady, aged twenty one, in whom, for severe left supra-orbital neuralgia, subsequently, what was supposed to be episcleritis of the left eye occurred, accompanied by conjunctival injection and œdema of the eyelids. The neuralgia being considered malarial in character, was treated with large doses of quinine, and fomentations of belladonna were applied to the eye. Large doses of quinine were required, to produce cinchonism. Patient was anæmic, and on ophthalmoscopic examination, both before, and still more markedly after, the administration of quinine, ischæmia of the retina was noticed.

At the time the patient came under my observation she presented an anæmic appearance, had very little appetite, and was still suffering from occasional attacks of neuralgia. There was no injection of the conjunctiva or sclerotic; the right eye was apparently normal; in the left eye the pupil was widely dilated, and not appreciably affected by light. Right eye $= \frac{16}{xxxii}$; Left eye $= \frac{3}{cc}$. On the fourth day following she returned with both pupils dilated to the utmost. R. $\frac{16}{cc}$; L. $\frac{3}{cc}$. At this time she reported that the left eye began to get worse upon her return home, but she noticed no trouble with the right eye until the previous day.

Recognizing the probable existence of quinine amaurosis, Dr. Hobby commenced the use of strychnia hypodermically, increasing the quantity each time, until the physiological effects were apparent. The improvement was rapid, and in ten days the acuteness of vision had returned from $\frac{6}{cc}$ to $\frac{16}{xx}$ for both eyes, and the visual field of each eye, which had been reduced to about one-tenth of the normal, had doubled During the use of strychnia the malarial symptoms disappeared, and the general physical condition improved. Six weeks later the acuteness of vision was unchanged and the visual field much increased in extent, but still less than half the normal

The inference to be drawn from this case would seem to be that the toxic effect of quinia primarily manifests itself in a single eye.

As there were symptoms of an episcleritis and supro-orbital pain of the left eye, and as belladonna had been used and the light had evidently had an irritating effect upon the retina of that eye, we would prefer to infer that in one congested, if not inflamed, eye of a pair to be affected by poisonous (toxic) doses of quinia, amblyopic symptoms are primarily manifest in the weaker eye of the two, both of which must sooner or later participate in the toxic amblyopia.

H. Derby, M.D., of Boston, reports (*Arch. Oph.* Vol. XI, No. 1)

Three Cases of Hydrophthalmus Treated with Iridectomy,

which he prefaces by the following remarks:—

"Cases of hydrophthalmus, cornea globosa, are as rare as they are unpromising. In the record of twenty years' practice I found but five instances of this disease. The only treatment seriously proposed has been iridectomy; and the encouragement to the performance of this operation has been given on grounds that are mainly theoretical. Instances of its performance have rarely been published. In his monograph on the subject,* written in 1869, Muralt states that he is not aware of any results having yet been recorded, and gives, himself, the notes of a single case. He admits that the operation is, in this disease, attended by unusual danger as regards healing and the chance of hemorrhage. And Schmidt, writing in 1877,† says "The secondary glaucoma which complicates cornea globosa (hydrophthalmus congenitus) offers a poor prognosis for iridectomy. Besides the danger of cyclitis, which may be easily excited by this operation, there are perilous possibilities of purulent infiltration of the vitreous, or of choroidal hemorrhages. When in these cases the rapid increase of intra-ocular pressure renders some kind of action necessary, it is best to try the effect of repeated paracentesis, which is certainly free from danger."

As we stated in the outset, the disease is very rare. Operations for its relief are, however, so much rarer, and so infrequently reported, that these cases here cited may well serve as a basis for generalization. They show that iridectomy, undertaken at a late stage of the affection, is liable to be complicated by hemorrhage, and to leave the eye in a state of chronic and painful irritation. But it cannot be denied that the disease is arrested, and that an amount of vision that was rapidly becoming extinct is spread over a series of years, to the great comfort of the patient. Case one had already lasted 14 years, and there was distinct optic-nerve atrophy at the time of the operation. Case two at least ten. Case three was taken in an early stage, and the

* Über Hydrophthalmus Congenitus. Zürich, 1869, p. 50.

† Graefe-Saemisch, Handbuch der gesammten augenheilkunde, vol. v, p. 136.

disease at once stayed. Eleven years have elapsed and no progress is manifest. I feel, therefore, justified in dissenting from the writer in Graefe-Saemisch, and in advising iridectomy.

Dr. J. L. Thompson, of Indianapolis, Indiana, records some "Practical Remarks on the Extraction of Foreign Bodies from the Iris."*

In the December number of the *Archives of Ophthalmology*, Vol. x, No. 4, Dr. Hirschberg, of Berlin, in his article on the

Extraction of Chips of Iron and Steel from the Interior of the Eye,

quotes from the London *Lancet*, as follows:—

"On May 18th, 1859, a girl, aged fourteen, was brought to St. Mary's Hospital, under the care of Mr. White Cooper. The previous day, while standing near her father, who was turning a piece of hardened iron in a lathe, a chip struck her left eye, which had since been in constant pain, though the sight was not materially affected. The chip was sticking in the iris, almost midway between its upper border and the pupil. The anterior chamber was full, and there was no mark of entrance in the cornea. . . . . Mr. White Cooper, fearing that difficulty would arise in grasping the smooth metal with forceps, suspended as it was in the loose membrane, decided on trying the effect of a magnet. The iris having been brought under the influence of atropine, whereby the foreign body was drawn near the margin of the cornea, the patient was chloroformed, and a cataract knife was passed through the cornea opposite the chip, and a sufficient opening made for its escape. A magnet was then applied to the wound, and in an instant the chip leaped from its situation in the eye and attached itself to the magnet. . . . . The eye was well in a week."

To the majority of the readers of the *Archives*, doubtless, the report of this case without comment will do no harm; but to the inexperienced it is likely to work immense mischief, by causing them to use atropine in similar cases. Yet we think that the end by no means justified the means used. The following case will show what dangers attach to the use of a mydriatic where foreign bodies lie in the anterior chamber.

W. F., aged 40, came to me in 1875, two days after the receipt of an injury to his right eye while hammering the iron hoop from a paint keg with the blade of a hatchet. A small piece of either the hoop or the hatchet flew into the eye, passing through the cornea and lodging in the stroma of the inner lower portion of the iris, midway between the ciliary and pupillary margins. The corneal wound had entirely healed, leaving scarcely a trace of opacity. His vision was good and he suffered but little pain. I proposed removing it, with probably a small portion of the iris, but he went off, promising to return shortly. I saw nothing of him for two days more, when he presented himself again, with the iris fully dilated and the body forced into the lens. I asked him how he came to use the atropine, and he replied that he had been reading "Gunn's Domestic Medicine." A well-marked opacity of a portion of the lens so obscured the metal that it could not be seen. Of course, I did nothing further than to watch and wait further developments. The last time I saw him, which was about two months after the injury, the lens was almost totally cataractous, with no inflammation remaining. He then passed from under my notice.

In the above case, by sacrificing a very small portion of the iris, he could have been given useful vision, and probably even without said sacrifice; but after the use of the atropine the body was forced through the delicate iris, the lens wounded, and now, of course, if anything is done it must be the removal of the lens, a very questionable operation where the other eye is not aphakial.

How would atropine have acted in the following case?—

White, Joseph, aged 28, a stone cutter, was wounded while dressing a stone with hammer and chisel, Jan. 31st, 1880. He immediately went to a "Surgical Institute," where, he says, they worked on him every day until he came upon me, on Jan. 5th, 1881, when I found a foreign body lodged on the upper pupillary margin of the iris, about three fourths of it upon the iris and the remainder hanging over and into the pupil. I placed him under chloroform, made a section of the cornea at its junction with the sclerotic, and removed the body, with a small portion of the iris, without any difficulty whatever, before the class, at our City Hospital. The operation was made on Saturday, and he read in the presence of the class on the following Wednesday. Now, had one used a mydriatic in his case, the body would as surely have been stripped off of the iris and against the lens, as was the foreign body forced through the iris, in the case above mentioned.

I have simply reported the two cases to show the danger of the use of atropine where bodies are imbedded in the iris. Many others, where

* To those of our readers who are settled in either a manufacturing or a mining district, we would call especial attention to Dr. Thompson's eminently practical remarks and valuable hints on the use of atropia. C. S. T.

percussion caps and pieces of iron have been so placed, have I, as well as all other eye surgeons of experience, had to do with, but their mention in detail would be unprofitable and superfluous.

Rupture of the Eyeball in its Posterior Hemisphere, from a Blow in the Face (*loc. cit. p.* 45).

By Julian J. Chisholm, of Baltimore.

The two cases of recent occurrence which I here report, although novel in my personal experience, would not have had publicity beyond the staff of the Presbyterian Eye and Ear Charity Hospital, before whom the diagnosis was made and verified after extirpation of the destroyed eyeballs, had I not found in a recent work on "Injuries of the Eye," by Ferdinand Von Arlt, a recognized authority on such matters, the following passage. I make the quotation from a translation of the German work by Dr. Chas. S. Turnbull, an American publication.

A paragraph on page 37 reads as follows: "Cases of rupture of the sclerotic are not rare. Such rents extend, without exception, to the ciliary body, even through it. Of ruptures in the posterior and sclerotic area, only one case is recorded (by Bowman), and here the rupture was not recognized until after the eyeball had been enucleated."

From the same work I make an extract from pages 22 and 23: "When a foreign body impinges against the eye with a certain degree of sudden force, and, on account of certain physical properties, such as size, bluntness, etc., cannot perforate its tunics, it expends this force by contusing the surface against which it strikes, or it causes either flattenings or indentations, the degree or extent of which depend on the character of the injuring surface, while, in the moment of injury, perhaps, no movement of the eyeball, as a whole, takes place. Now, an indentation or flattening of the eyeball cannot plausibly be considered possible, unless the same also changes its form *in toto*. Suppose we consider the point attacked as the pole, and the direction of the attacking force as the axis of a sphere; then the equator of the latter must become longer at the moment of the injury. Any resistance at the opposite wall, especially if distributed over an extensive area, will only serve to increase this change of form. The occurrence of a gap in such a wall, or of a projection upon it, will, when the globe is pressed against, produce a localized bulging—in the former case corresponding in shape and dimensions to the gap, and in the latter to an indentation or perforation of the sclerotic; *but such conditions hardly, if ever, occur.*" Sclerotic rupture is of *rare or non-occurrence* in those very localities where choroidal rents are most frequent." Again, from page 27: "The constant parallelism of the sclerotic rent to the corneal margin has an additional reason in the histological fact that the fibres of the sclerotic coat run parallel to the latter, within the confines of the ciliary region." Again, at page 38, "The sclerotic rent is linear or slightly arched, more or less serrated, and usually runs parallel to the limbus cornea, at a distance from two to five millimeters from the latter. In one case only (Schrœter, *Klinische Monatsblätter*, 1866, p. 248) did the rent run at an acute angle."

The following extract is made from a standard work on

Eye Injuries,

by George Lawson, F.R.C.S. "The split in the sclerotic is almost invariably near the margin of the cornea."

Case 1.—N. L., aged 27, was struck in the left eye with a chair, during a drunken broil. He was knocked down insensible, and had his nose and brow badly cut. When he came to himself he was taken home. In the meantime the eyeball had become very prominent, from swelling. He complained of great pain in it, and also of loss of sight. He was brought to the Presbyterian Eye and Ear Charity Hospital, for treatment, on the day after the accident. I found the eyeball very protruding, with lids much swollen and firmly stretched over the projecting ball, which was half exposed. The conjunctiva was much discolored with blood extravasation, and was chemosed in a heavy fold, parallel with the free border of the lower lid. When the lids were drawn apart the eyeball protruded so conspicuously as to show the whole anterior half of the sphere, and presented the condition known as paraphimosis of the eyelids. When thus exposed, the whole front of the eyeball was entire, apparently without any injury to its outer walls. The anterior chamber was full of blood, and there was no perception of light. I was induced to palpate the eye, and found its tension decidedly minus. It was so soft that the cornea could be corrugated, a condition that could not exist in connection with the intra-ocular hemorrhage without a giving way of the eyeball and the escape of some of its contents. Upon this diminished tension and excessive blood extravasation, with great prominence of the eyeball, I diagnosed laceration of the posterior hemisphere of the sclerotic. To prevent future suffering, I advised enucleation, which operation was satisfactorily effected, under chloroform. After making the conjunctival section around the cornea, the opening of the capsule of Tenon to reach the tendon of the external rectus muscle allowed the escape of a quantity of dark fluid blood, and indicated the location of the scleral opening, which an examination of the eyeball after its removal confirmed. The rent, which was a large flap, opening in the outer wall of the sclerotic, was located in the posterior hemisphere of the eyeball, between the insertions of the external

rectus and the oblique muscles. The source of hemorrhage was choroidal. The blood, after filling the eyeball and displacing the lens and vitreous body which had escaped through the sclerotic rent, had freely effused itself into the orbital space, and by excessive infiltration had caused the extrusion of the eyeball.

This was the first case that I ever diagnosed, in the absence of any visible wound, as posterior laceration of the sclerotic coat of the eyeball, as I was surprised at the facility with which the diagnosis could be made. The eyeball, full of blood, with excessive extravasation under the conjunctiva, and accompanied by marked minus tension, made the diagnosis very positive, of escape of some of the eye contents through a wound concealed from view.

I had been very much surprised, on previous occasions, at the amount of bleeding which could take place from a sclero-choroidal wound. In one, a case in which the eyeball had been perforated by a fragment of iron over the insertion of the superior rectus muscle, I had much difficulty in checking the profuse bleeding from the wound, which saturated thick compresses. I was, therefore, quite prepared for the excessive extravasation in this case. The accident just reported, of posterior scleral laceration, was from a blow received, through the lid, upon the elastic eyeball, resulting in the giving way of the eye-coats at a point nearly opposite to that upon which the blow fell; clearly a case of laceration by counter stroke, and at a point where the eyeball is well supported by muscles as well as by the fatty cushion of the socket.

This accident was the sequel of a Christmas frolic. In accordance with the experience of every surgeon who finds rare cases running in company, the day after New Year another case of eye injury, nearly similar in its results, was brought to the hospital dispensary for treatment.

Case 2.—I. F., aged 23, was wounded in the right eye, under the following peculiar circumstances: He and a friend were discharging pistols at a mark. While the patient was loading his revolver, his companion, standing near him, fired at a stone lying on the ground some ten feet in front of them. With the report of the pistol the injured man cried out that he had been shot, which remark caused much merriment, from the apparent impossibility of such an accident, as the shot had been fired away from him. Blood was seen, however, upon his face, oozing from a wound in the upper lid. The eye immediately commenced to swell. He complained of great pain, and said that his sight was knocked out. I saw him the day after the accident. The eyeball was very prominent, with excessive ecchymosis of the conjunctiva and with the anterior chamber full of blood. The pistol ball, in rebounding backward from the stone, had struck the lid, but not with force enough to penetrate. The skin of the upper lid only was broken, and from it the blood had escaped. The eyelids were much stretched over the protruding eyeball, and a fold of discolored, chemosed conjunctival tissue seemed to fill up the palpebral cleft. I elevated the lid upon a retractor, and found that there was no wound in the front of the eyeball, and yet upon palpation I found the tension very much diminished, so that I could corrugate the cornea. With the case of a week before fresh in memory, I did not hesitate to make the diagnosis of posterior rupture of the sclerotic coat of the eyeball, and recommended immediate extirpation of the destroyed and painful organ, as the quickest means of obtaining relief from suffering and safety for the other eye. Under chloroform the eye was enucleated. The eye-shell was found full of coagulated blood. Its normal contents had escaped through a large rent in the upper part of the ball, which opening extended backward from the insertion of the superior rectus tendon. The tendon of the muscle restricted the laceration to the posterior hemisphere of the eyeball, and prevented the wound from being seen when the eye was examined, before the operation.

The laceration seemed to have started from the point of the eyeball upon which the blow impinged, and had extended directly backward. An explanation for this rare accident may be found in the fact that when the injury was received the wounded man was loading his pistol, and was looking down toward his hand. He, therefore, had not only the eyeball well covered by the upper lid, but in the extreme downward movement of the eye a large part of the upper hemisphere was rotated forward and exposed to receive the blow. The pistol ball must have been somewhat spent, as it only broke the skin of the lid; but the blow was sufficiently sudden and sharp to indent the eyeball to splitting, and thereby make the rent through which the contents of the eye were projected into the socket and incarcerated within the cone of muscles.

These two cases, while rare accidents, at least as far as the establishing of a diagnosis is concerned, differ in the immediate cause of the rent. In the first case the laceration in the eye-coat was not in a portion of the eyeball brought immediately under the influence of the blow. When the man was struck in the face by the chair, the bruised temple, brow and nose indicated that the blow was received directly across the eye, upon its front, through the medium of the lids. The common seat of laceration near the corneo-scleral juncture did not yield, although this was nearest to the surface receiving the blow. When the sudden flattening of the eyeball took place the rent occurred near the opposite pole of the eye impinged upon. In the second case the rent started at the point receiving the blow, and extended backward in the direction of the posterior pole, and at right angles to the so called circular laceration around the corneal periphery.

Correspondence.

An Interesting Obstetrical Experience.

Ed. Med. and Surg. Reporter:—

Very early one March morning, two years ago, I was called twelve miles northwest of this city, to attend Mrs. M., in labor. I had never seen Mrs. M. before, in fact had never heard of such a person before, and consequently knew nothing of her previous history, or very likely I would have invented some excuse to have remained at home. Before that Sunday had wholly passed I had been tempted fully a dozen times to commit suicide in order to escape the dreadful burden of my existence then and there.

Mrs. M. was a small, emaciated, frail, exceedingly nervous woman, about thirty years of age, and this was her second confinement. The first, I learned by snatches during the day, was attended by a physician in Illinois, from whence the family came, who devoted several days to its completion, and whose moral character, in consequence, was forever wrecked thereby.

Mrs. M. was in bed when I arrived, neatly encased in a highly embroidered night-gown, frilled and tucked, and inserted with lace, quite up to her ears, and surrounded by the entire matronly force of the neighborhood, her large, black, searching eyes blinking like live coals, and her tongue going at the rate of one hundred and twenty strokes to the minute. The manner in which she had all of those women employed in waiting upon her would have outwitted the ingenuity of mortal man. Her pains were not worth speaking of, but as they came straggling along at the rate of one every half hour, she dextrously managed to overcome the whole loss of valuable time during such intrusions by drawing down the side of her face furthest removed from her friends, and nodding and smiling and endeavoring to keep up an unflagging interest in the general conversation with the side nearest to them. Whenever I attempted to make an examination, in order to determine, from time to time, how we were progressing toward some ultimate hope, she flinched and screwed herself in bed, and made things so decidedly uncomfortable for the entire household, that I had to desist and take my observations mentally. Moreover, such efforts always "chased away the pains," as she expressed it, and she would lie, in consequence, for hours, frequently, without even a twitch to disturb the muscles of her face. I passed the first few hours, until dawn, in fact, in desperate efforts to count the "ticks" of the clock. I was never so thankful for dawn in my life.

If there had not been some material changes in her pains about this time I truly believe I would have gone insane; but, as it was, however, these became a little more severe and prolonged, and I was thereby saved from an untimely grave. Her tongue, however, never ceased for a moment its usual rate of speed, and her perception of touch was more keenly alive than ever. Vainly, time and again, did I endeavor to administer ergot. The mere smell of the drug brought her stomach in such close proximity to her mouth, and her tongue so nearly assuming an attack of St. Vitus' dance, that I feared danger, and desisted, only to resume my mental observations. By the time the child was born, near nine o'clock that night, my hands were a mass of raw flesh, from my wrists to my elbows, from the prolonged pulling they had received from time to time at the hands of that woman; my coat was nearly off my back, in pieces; part of my suspenders gone; one whole sheet used up in the same pulling; the entire neighborhood completely worn out and speechless, from sheer exhaustion, and the woman herself only the ghost of a possibility. Moreover, the child was *atelectacic;* quite dead, I thought; placed in an old shawl for ten or fifteen minutes and laid by for dead, and only discovered to possess the faintest trace of life some time afterward, *accidentally*. By throwing cold water into his face frequently and repeatedly, however; by prolonged expansion and compression of the chest; by breathing into his mouth at intervals, and by spanking him lively over various portions of his body, sufficient life was manifested during a half hour's earnest work to insure safety. The child is well and hearty to-day, and I vaccinated him this summer. Charles H. Miller, M.D.

Peabody, Kansas.

Administration of Ether.

Ed. Med. and Surg. Reporter.

In your issue of August 5th, I read with interest and some profit a selection headed "Ether vs. Chloroform" (page 151). The subject is one of deep importance to every practitioner, but as country practitioners have not the same opportunity of making themselves acquainted, practically, with new methods, articles like the one referred to excite in them a greater degree of interest than in the city practitioner, whose opportunities for seeing are commensurate with his desires. The comparative merit and safety of ether are now established, beyond all reasonable doubt. So firm a hold has this fact taken of the mind of the profession, that I believe chloroform would be but rarely used, but for the facility of its administration, and conversely, the difficulties encountered in administering ether. Let us have a ready and satisfactory method of administering ether, and but few will adhere to chloroform.

In the selection, from the *British Medical Journal*, above referred to, the writer, who appears to have had large experience, recommends Clover's apparatus as the one thing to be desired in administering ether. Now, I know nothing about this rubber bag, nor any other bag of similar use or application. I cannot afford to go hundreds of miles to see one and witness its use in the hands of an expert. It is clear ether cannot be successfully and economically administered on a towel.

Now, will somebody of large practical experience rise and tell us some practical things about giving ether. We country practitioners want to know what apparatus to use and how to use it. We also want to know its cost, for we are not all rich. Let no one rise to explain who has a patent bag of his own, or who has a friend who owns one. Ontario.

The Electric Bath.

ED. MED. AND SURG. REPORTER:—

Some editorial criticisms on the use of the electric bath appeared in a weekly medical journal of your city, to which I replied; but as, evidently, the editor preferred his *ipse dixit* to enlightening his readers, he declined to admit my reply. As it is really a subject of general interest and therapeutic importance, I send to you the correction of the errors which that editor did not like to print, owing, no doubt, to an easily understood weakness of the human organization.

The portion of the editorial remarks which suggested this communication, was as follows: "The reason why it," the electric bath, "is regarded by all scientific electricians as a faulty method, is, that water offers such a powerful resistence to the passage of the current that the patient immersed receives too little to be effective." It must be admitted that theoretically this is entirely true, and that it is frequently reiterated by those who have little familiarity with the electrical bath. During the last few years I have seen considerable of the application of electricity, some 5000 applications in four years, nearly half of which were through the medium of the bath.

For the purposes of the bath the faradic current, almost exclusively, was used. The remark that the "patient immersed receives too little to be effective," shows ignorance. If the patients' nerves are to be relied upon to indicate the amount of electricity, and incredulous, stoical men may be taken as the subjects, as much electricity can be given with a large one cell induction battery as a patient can bear. A few—a very few, can stand the full strength of the instrument, and I have met with no one who has taken the bath, who denies the presence of a strong current when it has been desirable to give it. If "too little to be effective" be more than any ordinary person can stand, it must be admitted that the claims of the editorial are well founded. The strength of the current can, of course, be moderated from great intensity to as slight a degree as desired, precisely as out of the water.

For effectiveness, however, a large battery is not needed. I have replaced the ordinary stationary battery with a light, two-cell portable one, manufactured by the Galvano-Faradic Co., and the effect was nearly, if not quite, as marked as when the former was used. The experience with this current in the bath was detailed with some minuteness, in a recent number of the MEDICAL AND SURGICAL REPORTER, and scarcely requires repetition in this letter.

Since reading the editorial referred to, in order to clear away any possibility of doubt, and to secure, if possible, more convincing data, I have been making some experiments with the galvanic current and a galvanometer in connection with the tub. The distance across the tub, between the electrodes, was twenty to twenty-four inches, varying with the slant of the side.

The distance diagonally, as experimented with, four feet. The depth of the water, both with the person in and out of the tub, was kept at eleven inches. The electrodes extended constantly nine inches into the water, and were of plates of copper; the tub being of wood. The body of the person when in the water was two to four inches from the electrodes, and the feet six or more inches. The temperature of the water was 94 Fah.; and the number of cups (modified Daniels) twenty. The galvanometer is of Trouvé make (Paris), and a good one. The result was as follows:—

Direct across tub	without	person	in, gal.	39 to 41
Diagonally	"	"	"	34 to 36
Direct	"	with	"	42 to 43
Diagonally	"	"	"	38½ to 40
Poles of battery touching out of water			"	45
Current passed through chest			"	17

The experiments were repeated several times the same day with the same person. The figures would naturally vary somewhat when tried on different persons. Precautions were taken to avoid every apparently possible chance for fallacy. The purity of the water must also modify the result of experiments.

Five conclusions seem patent, from the foregoing: 1st. That a large amount of electricity passes through the water. 2d. That more passes through the water than passes through the person out of the water. 3d. That the person in the water conducts better than the water alone (see also Beard & Rockwell's experiment). 4th. That at least the difference, as indicated by the galvanometer, between the amount of electricity which passes through the water alone and when the person is in it, must pass through the person; and as it passes through the body more readily than through the water, probably much more than that difference passes through the person. 5th. It seems reasonable to consider the skin the chief medium of resistance when administering electricity, and that the bath largely overcomes this. Also that the reason that the body conducts better than pure water is on account of the large percentage of salts which are contained in its liquids.

In conclusion, I should be very glad to demonstrate the facts here claimed for any physician who may choose to call upon me.

W. O. STILLMAN, M.D.

Saratoga Springs, N. Y.

NEWS AND MISCELLANY.

The Lehigh Valley Medical Association.

The second annual meeting of the Lehigh Valley Medical Association, was held at Allentown, August 16th. This Association is composed of physicians from Warren Co., N. J., and the counties of Northampton, Lehigh, Bucks, Carbon and Monroe, in this State.

Dr. P. Reichard, of Allentown, read a paper entitled "Cases of Surgery from my Note Book." Dr. J. Ewing Mears, of Philadelphia, read a paper on "Observations on the Value of Modern Methods in Abdominal Surgery, with the study of the Results in Twenty-four Cases of Abdominal Section." Dr. Traill Green read a paper for Dr. Hiram Corson, on "Smallpox." Dr. Amos Seip, of Easton, recited some of the sights he had seen during his recent trip abroad. He

saw a speculum two thousand years old, which had been exhumed from the ruins of Pompeii, and which was very much like those in use to-day.

The following officers were chosen for the ensuing year: President, Dr. Traill Green, of Easton; Vice-presidents, Dr. Alfred J. Martin, Allentown; Dr. Amos Seip, Easton; Dr. Osman, of Warren county, N. J., and Dr. Joseph Thomas, Quakertown; Secretary, Dr. Isaac Ott, of Easton; Treasurer, Dr. Abraham Stout, Bethlehem.

The new president was inducted into office, and on taking the chair spoke of the progress the science of medicine has made since he entered the profession, and how much more lucrative it is now than it formerly was. After passing a resolution of thanks to the medical fraternity of Lehigh county, the meeting adjourned.

Sanitary Precautions for Canning Establishments.

Dr. W. S. Forwood, at the request of the Board of Health and Medical Society of Harford County, Md., has prepared an address to the canners of the county on the hygiene of their establishments. After reciting the usual rules of cleanliness and care in selection of fruit and vegetables for canning, it is recommended that the refuse be daily scattered over the surrounding fields, by which means it will be disposed of, at the same time that it fertilizes the ground. Attention is called to the occasional presence of lead in the tin from which the cans are made, and it is suggested that glass jars should be used in preference. Fresh lime or plaster should be freely scattered, every day, about the premises. The address contains many wise suggestions.

Philadelphia County Medical Society Lectures.

The annual course of lectures under the auspices of this Society will be given during the winter of 1882-83, by Prof. Austin Flint, Senior, of New York, who will consider subjects relating to the physical diagnosis of internal diseases.

OBITUARY NOTICES.

PROF. F. M. BALFOUR,

The distinguished Professor of Animal Morphology in the University of Cambridge, recently lost his life in Switzerland, as the result of an accident. With the national love for Alpine climbing so characteristic of Englishmen, Dr. Balfour attempted what has been called a most dangerous feat, which has terminated so disastrously. The late Professor, though but thirty years of age, was the most distinguished graduate Cambridge has had since the time of Clifford, and in his own special field of embryology he was without a rival. The deceased naturalist was a Fellow of the Royal Society, Royal Medalist in 1881, M.A. and Fellow of Trinity College, Cambridge, LL.D. of Glasgow University, and President of the Cambridge Physiological Society. He was a younger brother of Mr. Arthur Balfour, M.P. for Hertford, and nephew of the Marquis of Salisbury.

DR. WILLIAM ATWATER.

Dr. William Atwater, a physician of New York City, died at Centre Harbor, N. H., on the 13th of July, after a brief sickness with which he was stricken while on a visit to the White Mountains with his family. Dr. Atwater was born in Connecticut, about 65 years ago, and was educated for the medical profession. He was graduated at the College of Physicians and Surgeons, having Dr. Willard Parker as a preceptor during his student life. He served for several years as a physician in Bellevue Hospital and in the institutions on Blackwell's Island, and afterward engaged in a large private practice. The worry and strain of his professional work proved too great for his system, however, and fifteen years ago he relinquished active practice, and visited the coal and oil regions, becoming deeply interested in religious matters in that locality. He founded a Congregational church in Pennsylvania, and did much charitable work among the sick poor, whom he was accustomed to attend without fee. He leaves a family and many friends in New York by whom he was highly regarded.

DR. GEORGE R. DENNIS.

Dr. George R. Dennis died at his home in Somerset county, Md., August 13th. He was born April 8, 1822. Graduating at the University of Pennsylvania, he practiced medicine until 1855, when he retired, on account of ill health, since which time he has devoted himself to agricultural pursuits. He was in the State Senate in 1854, for the full term, and in 1867 was a member of the House of Delegates. In 1872 he was elected to the State Senate and resigned to take his seat in the United States Senate, to which he was chosen while a State Senator. Dr. Dennis was, in politics, formerly a Whig. He was a member of the Whig National Convention of 1856, which nominated Fillmore and Donelson. He was also a member of the Democratic National Convention of 1868, in New York, which nominated Seymour and Blair, and also of the Democratic National Convention which nominated Tilden and Hendricks.

DR. M. A. WILSON.

Dr. Milo A. Wilson, formerly of New York, died in Denver, Col., of Bright's disease, July 5th, 1882. He was born in Pittsburg in 1845, and was the son of the late Dr. R. A. Wilson, and brother of the late Oregon Wilson, the artist. He was at one time one of the surgeons of the Seventh Regiment and a member of the medical staff of Bellevue Hospital. While in that position he became particularly interested in the improvement of the condition of the insane, and made a number of interesting experiments to ascertain the effect of music upon the patients at Blackwell's and Randall's Islands. Dr. Wilson was the author of several medical books.

QUERIES AND REPLIES.

E. T. G. would be glad to have our readers give their experience in the treatment of spermatorrhœa; remedies used, etc.

E. W. McG., Canada.—Write to the London *Lancet* for the address you require.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

CHYLIFORM EFFUSIONS INTO SEROUS CAVITIES.

BY M. DREYFUS-BRISAC,
Physician to the Paris Hospitals.

The production, in certain serous cavities, of an effusion resembling chyle or milk was noticed as early as the beginning of the eighteenth century (Saviart, 1701); but these observations, including several reported by eminent clinical observers, such as Chomel, Rokitansky and Oppolzer, did not attract special attention; a complete study of the question was not made until Quincke published a memoir founded on the observation of three cases, in the *Deutsch, Arch. f. Klin. Med.*, 1875. An important communication on the subject was made by M. Debove to the Soc. Med. des Hôpitaux, May, 1881.

In the course of this work, M. Debove, after considering separately most of the observations scattered in different scientific publications, describes and criticises the two theories put forward to explain the production of such an effusion. He proposes instead of the appellations, milky, chylous or fatty effusions, successively employed to designate the disease, the denomination chyliform effusion, as having the advantage of not positively asserting the chylous nature of the liquid effused. It is, then, with good reason that this designation has been adopted in two recent memoirs on the subject: the thesis of Mme. Perrée (Paris, 1881), a good résumé of all the documents we possess on the subject, and the interesting inaugural thesis of Ferdinand Veil on the "Pathogenesis of Chyliform Ascites," a work containing some original researches.

Under the same category may be considered several cases of benign, purulent pleurisy, reported in the Leçons Cliniques, of M. Gueneau de Mússy, and in the thesis by Sainton (Etude sur une varieté latente et benigne d'empyème, Paris, 1881).

Finally, we should mention, in order not to remain entirely in the domain of internal pathology, the interesting case of hydrocele, containing a fatty liquid, reported by M. LeDentu to the Soc. de Chirurgie (Dec. 14th, 1881), and the discussion it provoked at that period.

To resume, with the exception of one case in the tunica vaginalis, chyliform effusions have been found in but two serous cavities, the pleural and the peritoneal. The whole number reported consist but of ten cases in the pleural cavities, eighteen in the peritoneum, and two in which the effusion occurred in both serous cavities at the same time. From whence we may conclude that this morbid process is exceptional, though many cases may have passed unperceived or been wrongly interpreted. In chyliform effusions the liquid is bluish-white or yellowish, opaque, alkaline, with little or no odor, very much resembling emulsion of sweet almonds, and has no tendency to become coagulated when left standing.

Microscopical examination reveals the presence of fatty granulations and even larger collections, almost drops of oil and a certain quantity of crystals of cholesterin. The liquid contains no red globules; the pus globules

(leucocytes) are either entirely wanting or very few in number, and in a more or less degenerate or fatty state.

In some cases, as in the observations reported by Bacelli, microscopical examination alone can serve to distinguish the liquid from that found in ordinary empyema; as the fatty matters are in a state of emulsion these effusions will not be confounded with any of those collections of pus which hold in suspension a certain proportion of fatty corpuscles.

The chemical analysis of these chyliform effusions has been made several times, by Bergeret (*Journal d' Anat. et de Physiol.*, 1873) and by M. Yvon in M. Debove's case.

This last gave the following figures in weight per 100 parts: Coagulable albumen 68, cholesterine 3.8, fatty matters 3.4, nitrogenized products 1.50, mineral water 7.1, and water 13.6.

Chyliform effusions are ordinarily very abundant and are reproduced very rapidly, even after repeated aspirations. Thus M. Gueneau de Mussy took from the pleural cavity more than six quarts of liquid in eighteen days; while Quince aspirated three times in twenty-one days, taking away six quarts of liquid; the patient died on the same day the third aspiration was performed, and at the autopsy seven quarts of lactescent liquid was found in the pleural cavity.

The effusions into the peritoneal cavity were even more marked. Without speaking of Saviart's case, where two hundred and eighty-nine pints of liquid were withdrawn in nine months, we note that Veil withdrew by aspiration twenty-three quarts in twenty days, and Gaucher twenty-seven quarts in seven days.

On all these points the authors are in accord, but regarding the etiological conditions inducing this variety of effusion, its clinical characteristics and pathogenesis, the opinions widely differ, and there seems to be no means of arriving at a plausible solution of the problem.

The analysis of reported observations and the lesions revealed on autopsy afforded very imperfect data regarding the etiology of chyliform effusions. They have been observed at every age, from six months (Wilhelm's case) to sixty-three years (Debove), in individuals enjoying good health, as well as those in a cachectic condition.

Almost the same causes are recognized for a chyliform effusion as for an ordinary pleuritis; the effects of cold, a traumatism, excessive fatigue, and finally, in two or three cases, pulmonary tuberculosis.

As regards chyliform effusion into the peritoneum it seems to be produced under the same influences as ordinary serous ascites; for careful consideration of all known cases give as concomitant diseases, cirrhosis of the liver (four cases), simple chronic peritonitis (two cases), tuberculous peritonitis (five cases), cancerous infiltration of the peritoneum and mesenteric ganglia (three cases).

Finally the puerperal condition was considered to have a part in the causation, in one case of ascites (Chomel), and one case of chyliform pleurisy (Bacelli).

As regards symptomatology, we have no interesting peculiarities to mention, except in pleural effusions.

Chyliform ascites presents the same signs clinically as ordinary ascites, and the flow of a milky liquid during aspiration has been always a surprise to the operator. The course of the morbid process, or rather symptoms, depends not on the nature of the liquid effused into the peritoneum, but on the organic affection accompanying it. Or, as in almost all cases, the concomitant disease affects the entire system, or consists in some local disease tending to a fatal ending, such as tuberculous peritonitis or cirrhosis of the liver, it may generally be considered, when a lacteal liquid is obtained on paracentesis of the abdomen, that the prognosis is of extreme gravity.

The question, from a clinical point of view, is more complex as regards chyliform pleurisy.

The affection generally commences like acute pleurisy of ordinary intensity, but with this characteristic, that the local phenomena are most marked.

On account of the abundance of the liquid effusion, there may be notable enlargement of the thorax with compression of the lung and displacement of the neighboring organs, whence frequent and severe attacks of dyspnœa. Such symptoms call for immediate intervention, and aspiration is followed by very evident amelioration. The general symptoms are not urgent; there is but slight rise of temperature toward evening, no diarrhœa, no night sweats, in other words, no symptoms of hectic fever.

But as the chyliform liquid seems to have no tendency toward absorption, and is rapidly reproduced with all the symptoms of lung compression, etc., it is found necessary to aspirate frequently. It is the exception to observe a case where complete cure is obtained. If the general health remains comparatively good, aspiration may be repeated from time to time, each opera-

tion being followed by a period of amelioration, during which the patient may be able to follow up his usual occupations.

The march of the morbid process resembles that observed in chronic sero-fibrinous pleurisy, or rather in hydrothorax; but what seems to specially characterize chyliform pleurisy is the non-production of adhesions, or of false membranes which bind down the lung; so that when the liquid is withdrawn the lung may return to its normal position and recover the plenitude of its functions.

Such appears to be, as far as can be judged from the small number of cases observed, the clinical peculiarities appertaining to chyliform effusions of the pleura. So that the authors who attribute this form of pleurisy to a special metamorphosis of a liquid which was primarily purulent, are compelled to consider it a very benign form of empyema. (Gueneau de Mussy, Sainton.)

As a practical deduction from these facts, in any case where there is doubt regarding the purulent nature of a liquid obtained by aspiration, microscopical examination should be made, to determine whether or not it is a case of chyliform effusion; for in such cases the only treatment applicable is "Thoracentesis, with all the precautions judged necessary in cases where abundant effusion exists. The operation is necessary and may bring about complete cure" (Sainton). We will add that, as far as is known, there are no cases on record where the chyliform liquid became purulent.

The semeiology is very vague, and the question of pathogenesis still more obscure. In this respect we find ourselves in presence of two theories diametrically opposed to each other.

Some observers admit, with Quincke, that the chyliform liquid is really chyle, and that these effusions are due to the rupture of one of the chyliferous vessels or of the thoracic duct itself; others consider, with Gueneau de Mussy, Sainton and Veil, that the chyliform liquid is produced by the fatty transformation of an effusion which was at first of a purulent nature.

The theory proposed by Quincke has no foundation in fact, and we might say with Veil that "the rupture of any of the chyle ducts has been so exceptionally reported, and then with so little appearance of authenticity, that this cause can not be considered in the search for explanation of effusions of a chyliform nature."

Again, in several observations reported in detail, a circumstance is noted which is interesting in this connection; in certain cases of chyliform pleurisy, or ascites, there exists a certain amount of œdema of the limbs, and puncture of the skin at regions distant from the thorax gave issue to a lactescent liquid. It is difficult to admit that chyle escaping from the ducts could spread to such a distance in the cellular tissue.

In favor of the second theory, more positive arguments may be adduced. That the pus, deprived of the pyogenic germs (microbes) to which its activity was due, may undergo fatty degeneration, is not impossible, and a similar process has been observed in subcutaneous purulent collections. On the other hand, in a case observed by M. Gueneau de Mussy, it would seem that this metamorphosis did really occur, for the liquid, which at first contained pus globules in great numbers, assumed, later, all the characters of a chyliform effusion. We should, then, be willing to admit that this theory applies to certain cases; this would be a relatively favorable termination of pyothorax.

But how are we to explain the greater proportion of cases in which a lactescent liquid is obtained at the first aspiration?

How, in particular, are we to explain the production of chyliform ascites? Should we admit, with Veil, the existence of "a special form of purulent peritonitis?" We should hesitate to follow the opinion of this author, for this variety of ascites is observed in the course of affections, such as cirrhosis and chronic peritonitis, which generally give rise to ordinary serous effusion; and, again, the symptomatology does not serve to corroborate the hypothesis of diffused suppuration of the peritoneum.

It is, perhaps, in another direction that the researches should be pursued. There exists an observation, due to Winkel (*Deutsch. Arch. f. Klin. Med.*, vol. xvii), where, in a lactescent liquid developed in the peritoneal cavity an immense quantity of small entozoa were found. This patient, a female, had lived ten years at Surinam. This fact is, it is true, unique; but since it is at present proved that chyluria is frequently due to the presence of micro organisms, would it not appear probable that certain chyliform effusions have an analogous origin?

In reality, it is a confession of ignorance we are obliged to make, and for the moment we are obliged, with M. Debove, to reserve the question of pathogenesis, and create among the varieties of effusion observed in serous cavities a separate place for the variety we have essayed to describe in this lecture, after the consideration of evidence as yet, unfortunately, very incomplete.

Communications.

A CASE OF ACUTE PERITONITIS.

Read before the Litchfield County Medical Association, at meeting of July 11th, 1882,

BY WILLIS J. BEACH, M.D.,

Of Litchfield, Conn.

Flossie H., aged 15, a bright, active, healthy girl, with no former illness and good family history. Was first seen June 7th, 1882, and presented the following symptoms and history: Pulse 134, temperature 104, severe headache and pain and tenderness in the right iliac region; parents stated that she had had as many as ten or twelve thin, greenish discharges from the bowels within the preceding twelve hours, but that previous to that her bowels had been rather constipated; that she had complained of headache, and generally of not feeling well, for something over a week, and had eaten next to nothing, and that on the evening of the 5th she began to complain of pain in her stomach and bowels, and became confined to the bed. When first seen, although there was undoubted tenderness in the right iliac region, there was no tympanites, and no rigidity of abdominal muscles, the absence of which symptoms, together with the history of headache and diarrhœa, completely led me astray in the diagnosis, and I stated to the parents that the diagnosis lay between simple fever and typhoid, with the chances decidedly in favor of the latter. I gave at this visit a febrile mixture of digitalis and nitre, and a camphor and opium pill, to be repeated once in four hours, and advised tepid sponging and milk diet. I saw her again on the evening of the 8th, and notwithstanding the patient had expressed herself as being much relieved by the opium, and had been able to get some sleep, I found a different state of things than I anticipated. Pulse 124, temperature 101, some pain in right iliac region, no further discharges from the bowels, but sufficient tenderness and rigidity of abdominal muscles in iliac region to warrant a change of diagnosis to circumscribed peritonitis. At this time she began to lie upon her back, with knees drawn up. I at once increased the amount of opium, giving two grains once in two hours, and also two drops Norwood's tinct. veratrum viride every two hours.

I will not detail the daily progress of the case, but give a general outline of the treatment pursued, as showing the good effects of opium in this disease. On the 11th inst. she was seen also by Dr. H. W. Buel, of this place, in consultation, who coincided with me, both in regard to diagnosis and treatment. From this time on to the 18th there was steady increase in the peritonitis until it became general, with great general distention and tenderness of whole abdomen. The veratrum was pushed from day to day, until she took 5 drops Norwood's tincture every two hours, and was able to take this amount for four consecutive days, keeping the pulse in frequency at from 85 to 95. On the 18th, without previous warning from nausea, she was taken with vomiting, and the veratrum was immediately discontinued. She had only two attacks of vomiting, and by resorting to the hypodermic use of morphia for a few times, was able to resume medication and nourishment by the mouth. The opium during this period was pushed from day to day, until she took 108 grains every twenty-four hours, and continued it in this large amount for four consecutive days. She also took during all this period, in which the disease was at its height, twelve ounces of rum each twenty-four hours. On the 18th she complained of a frequent desire to have a movement of the bowels, and this feeling continuing to annoy her, on the 19th she was given an enema of a pint of sweetened water, which was retained, but did not procure an evacuation. On the 20th, however, she had, spontaneously, two large fecal evacuations, which apparently gave her much relief. This day seemed to be the turning point in her favor, and from this time on to the 28th there was a gradual but steady convalescence. The opiates and stimulants were gradually withdrawn, and at date last mentioned, altogether discontinued. During three or four days at the height of the disease the insomnia and subsultus, and other symptoms of profound disturbance of the nervous system were so great that, in addition to the other remedies used, bromide of potassium in thirty-grain doses, repeated in from two to four hours, as seemed to be required, was resorted to, with much apparent advantage.

The following table shows the record of pulse, respiration and temperature, so far as a record was kept:—

June	7, P.M.,	pulse	134,	.....		temp.	104
"	8, "	"	125,	.....		"	101
"	9, A.M.,	"	115,	.....		"	102
"	10, "	"	90,	.....		"	101
"	11, "	"	100,	.....		"	$102\frac{1}{5}$
"	11, P.M.,	"	96,	.....		"	$102\frac{3}{5}$
"	12, A.M.,	"	85,	resp.	12,	"	$101\frac{1}{5}$
"	13, "	"	85,	"	14,	"	$101\frac{4}{5}$
"	13, P.M.,	"	85,	"	12,	"	$102\frac{1}{5}$
"	14, A.M.,	"	90,	"	12,	"	102
"	14, P.M.,	"	90,	"	15,	"	102
"	15, A.M.,	"	90,	"	14,	"	$100\frac{2}{5}$
"	15, P.M.,	"	97,	"	14,	"	101

June	16,	A.M.,	pulse	90,	resp. 12,	temp.	100
"	17,	"	"	97,	" 14,	"	100
"	18,	"	"	105,	" 11,	"	99 4/5
"	18,	P.M.,	"	105,	" 12,	"	100 3/5
"	19,	A.M.,	"	110,	" 13,	"	101 3/5
"	19,	P.M.,	"	117,	" 14,	"	102
"	20,	A.M.,	"	108,	" 15,	"	100 1/5
"	21,	"	"	104,	" 14,	"	99
"	22,	"	"	92,	" 12,	"	98 3/5
"	23,	"	"	88,	" 10,	"	98
"	24,	"	"	96,	" 14,	"	98 3/5
"	25,	"	"	80,	" 14,	"	97 3/5
"	26,	"	"	72,	" 15,	"	97 3/5
"	28,	"	"	85,	" 20,	"	98 3/5

I will not take much time in comments upon the case, but simply call attention to a few of the most important features that seem of an unusual character.

In the first place, it certainly seems to have been, in this instance, an idiopathic or spontaneous affection, and not incidental to some other affection of the abdominal viscera.

Prof. Flint says, "it may occur from exposure to cold, but such cases are extremely rare." In this case, so far as could be determined, there was no other cause, and, in fact, no other evidences of a cold; but the parents stated that the girl had of late been gardening a good deal in the wet grass, and with insufficient clothing, and at or near the time menstruation should have occurred.

A peculiar feature also was the severe diarrhœa occurring for twelve hours at the very onset of the disease. It will be observed also that the case required an unusual amount of opium. Flint says "that, as a rule, both in his and in Prof. Clark's cases, from three to four grains of opium, repeated once in two hours, is sufficient. In this case, notwithstanding the patient was only a slight, fifteen-year old girl, she took, with apparent advantage, nine grains every two hours, for several consecutive days. It may be noted, also, that the doses of Norwood's tincture were exceptionally large and well borne, and I cannot help but think may have contributed to a favorable termination. During the whole three weeks of the illness, the patient took two quarts of milk in each twenty-four hours, and nothing else in the way of nourishment was attempted. She was frequently sponged with tepid water, at which she expressed great satisfaction, and during the worst of her sickness ice was constantly applied to the head, and seemed to help very much in controlling the extreme restlessness. In the twenty-one observations of the respirations it may be noted that, notwithstanding the large doses of opiates, the respirations were only at or below 12 on seven different occasions, and only once so low as 10. Flint says they should not be kept below 12. I think Prof. Clark advises that they be kept as low as 7 or 8.

One point more and I have done; Wunderliech's Thermometry says that, in peritonitis, "sub-normal temperatures are especially common, and always suspicious; death may follow them closely." In this case, on the 25th and 26th insts. the patient had a temperature of fully a degree below normal, but all of the other symptoms were those of convalescence, and no apparent harm came from the condition. The girl has made an uninterrupted and rather rapid convalescence, and is now able to walk about, and is fast regaining her strength.

A NEW METHOD OF TREATING UTERINE HEMORRHAGE.

BY M. R. BARKER, M.D.,
Of New Castle, Pa.

Physicians of experience know the extreme difficulty, sometimes, of arresting uterine hemorrhage, the uterus seeming to defy all remedies, and pouring forth the sanguineous fluid in spite of astringents, ergot, the tampon, etc., etc. The danger of uterine injections often causes physicians to hesitate long before resorting to them. I have been frequently placed in this dilemma, and although I have used injections successfully, yet I must admit that I always felt relieved when I found that the injection had not produced any dangerous consequences.

In view of the foregoing considerations I concluded to take a departure from the usual methods, as will be seen in the report of the following cases:—

Case 1.—During the latter part of October, 1881, I was called to see Mrs. H., who was suffering from severe uterine hemorrhage. I treated her with the ordinary remedies, but without producing any permanent benefit. The tampon, applied again and again, would, of course, produce temporary suspension of the flux, but upon its removal the hemorrhage would return as badly as ever. The constitutional effects resulting from the loss of so much blood becoming alarming, I concluded something must be done.

At my next visit I took my uterine applicator and placed upon it a spiral slide, leaving about three inches of the point uncovered. The point I wrapped with absorbent cotton in the same manner as for treating the uterine cavity for endometritis, with the exception that the end next the slide I made considerably thicker than the rest, and tied a thread around it, so as to withdraw the cotton when its purpose was accom-

plished. I then dipped the cotton into glycerine, and dusted it effectually with powdered persulphate of iron. I then exposed the os with a speculum, and passed my loaded applicator into the uterine cavity, and with the slide pushed off the cotton and left it. From that time my occupation in this case was gone. She made a rapid recovery.

Case 2.—March 30th, 1882, was called to see Mrs. W., who had been suffering with uterine hemorrhage for two months. I was of the opinion that she had had an abortion, but she denied it. She had been under the care of another physician, who had treated her with the usual remedies, the principal one being ergot. Her clothing and bed showed very plainly the severity of the hemorrhage. I also found several clots in the vagina. I used the persulphate in the same way as in Case No. 1. When leaving I requested her to let me know in a few days how she got along. In about a week I received a note from her saying that the hemorrhage ceased from the time of the application, and that there had been no return. I have met her several times since, and she was quite well.

Case 3.—Mrs. R. aborted about May 1st, 1882. I saw her June 29th. The attending physician had gone through the usual routine of remedies, administered internally, apparently without benefit. I immediately made an application of the persulphate of iron after the same manner as described in the former cases, and the result was an immediate arrest of the hemorrhage. She was in my office to-day, and as I had this article partly written, I asked her the particulars of her case. She said she had "wasted" for eight weeks, and that she had taken ergot nearly all of that time; and also that there was scarcely any discharge perceptible after I introduced the tent, and that there had been none since, beyond her periods.

It seems to me that this is a much more rational method of treating uterine hemorrhage than by either internal remedies or by injections. That it is much safer than by injections no one can deny, and I would not hesitate now to depend upon it, to the exclusion of all other remedies. This preparation of iron is used *ad libitum* in gynæcological surgery, without injury, and I am satisfied that it is equally as beneficial and harmless in ordinary uterine hemorrhage.

I am of the opinion that the benefit derived from this plan of treatment is not altogether from the styptic action of the iron, but that a portion of it arises from the intolerance of the uterus to any foreign substance in its cavity, the muscular fibres contracting forcibly to expel the intruder, and I cannot see why an ordinary case of uterine hemorrhage could not be treated successfully by non-medicated tents alone.

Hospital Reports.

BELLEVUE HOSPITAL MEDICAL COLLEGE, N. Y.

CLINIC BY AUSTIN FLINT, M.D.,

Professor of Pathology and Practical Medicine.

Pneumonia.

Gentlemen:—I will read the hospital record of this case, give the physical signs, and mention the therapeutical indications.

He is an Italian, 33 years of age, a laborer, and entered the hospital on the 27th of last month, six days ago. He cannot speak English, and the history is, therefore, somewhat imperfect. He walked to the ward on admission; the face was flushed; the temperature was about 102° F. It was impossible to learn whether he had any pain, but on physical examination the movements on the left side were found to be restricted. On percussion there was dullness over the lower portion of the left lung up to the angle of the scapula. In the infra-axillary region dullness extended up to the fifth rib. On auscultation the respiration was found to be purely bronchial over the lower portion of the left lung, shading off into broncho-vesicular as we ascended, where also a crepitant râle was heard. Over the lower portion a grazing friction was apparent; also bronchophony. Higher up we found increased vocal resonance. These were signs of pneumonia. The patient was put on milk diet, a little whisky, and five grains of quinine every six hours. The temperature was not sufficiently high to call for antiseptic treatment. At 5 P.M. it was 102.25. The expectoration was gelatinous and rusty.

On the 28th, temperature 101°, the respirations 20 per minute, which was considerably lower than before. There was vesiculo-tympanitic resonance over the unaffected portion of lung on the same side. On the 31st, there was a subcrepitant râle, indicating resolution.

Here we have apparently a very good typical case of pneumonia, which has pursued its course without much medicinal interference. The patient has had a little stimulant, on the general principle that patients admitted into Bellevue Hospital have usually been addicted to the use of alcoholic stimulants to some extent; and he has had five grains of quinine three times a day. The disease, in fact, has been allowed to pursue its own course, and the patient may now consider himself convalescent. It is a self-limited disease.

Resolution is now nearly complete, as is indicated by the disappearance of the abnormal physical signs before referred to, and you would hardly be able to tell now, by an examination of the lung, that this was the affected side. Here, then, is an instance of a very rapid resolution, and as you meet with cases in private practice, bear in mind that the period of the resolving stage of

pneumonia varies very much in different cases. Sometimes it is astonishing with what rapidity the absorption of so much matter takes place. Recollect that this patient must have had at least a pound of exudation in the lower lobe of the left lung, and now, within three or four days, it has pretty much all gone. In other cases it will require many days, and sometimes even many weeks, before it disappears. In some rare cases resolution is so slow that you will conclude you have something more than a pneumonia; that you have a phthisical exudation instead of a pneumonia. But after a while resolution becomes finally accomplished.

Renal Disease.

I shall now show you a case of general dropsy depending upon renal disease. I refer to this case now, so that, in some regards, you may make the contrast between two classes of cases. Here is the patient, and you see he presents a pallid aspect. He is anæmic, as is apparent when you look at him. There is some tumefaction of the face, but not, I believe, as marked as it was a few days ago. When I saw him day before yesterday I am quite sure he had more œdema here than he has to-day. And you see he lies in bed without giving any evidence of embarrassment of breathing. Now take the points of contrast between cases of cardiac dropsy and this one. In the first there is usually more or less lividity of lips and face. You may have the same amount of œdema, or more, but instead of this pallor we have a dusky or well marked livid hue, since almost invariably, perhaps you may say invariably, there is more or less evidence of embarrassed respiration. Here are points of contrast which pertain to the general aspect of the patient in cases of cardiac dropsy and cases of dropsy from renal disease.

Let us see what the history tells us, and then we will try and determine what probable variety of renal disease is present in this case.

He is thirty-five years of age, a native of Ireland, a stone cutter. Admitted on the 27th of last month. He had always been in good health, a hard working man, up to April last, when he began to have sciatica, and this annoyed him more or less until the latter part of July, when he noticed his penis was considerably swollen. He was in the habit of pricking the skin with a needle and letting the water run off. He must have had some œdema of the feet, but it was not so marked as to cause him to notice it much; could not have given him much inconvenience. Soon after this the feet, the legs, and the scrotum began to swell, and he noticed puffiness of the face. He continued to work until in July. Just previous to this time he noticed that he began to become considerably enlarged. He was often passing a large quantity of water, often getting up several times in the night. For about three months past he has kept abed most of the time. The dropsy increased. Five weeks ago he began to be affected with shortness of breath. He never had rheumatism, and none of the eruptive fevers since childhood. Was in the habit of using intoxicating liquors steadily, seldom, however, becoming intoxicated. He suffered from shortness of breath, loss of appetite, loss of strength, presented a cachectic appearance, felt water-logged, being œdematous in all parts of the body except the face; the abdomen was much distended, there being evidence of fluid on palpation; also signs of fluid in both pleural cavities. He was placed upon the following remedy: two drachms of the infusion of digitalis; two drachms of the liquor ammoniæ acetatis; one drachm of the spirits of nitre, taken every two hours, as a diuretic.

The urine was amber colored, alkaline, the specific gravity 1.014; contained forty per cent. of albumen. There were found large and small hyaline, and granular and fatty casts. After admission, his respiration becoming labored, he was aspirated, seventy ounces of clear serous fluid being withdrawn. Last night he received a dose of Epsom salts, which produced a free, watery stool. He afterward received other diuretics, as the compound jalap powder, which seemed to increase the quantity of urine. It is noted that on yesterday he was not much improved. He was weak. The fluid on the left side of the chest extended up to the fourth dorsal vertebra. The specific gravity of the urine was then 1.018, and contained eighty per cent. of albumen. A diuretic was given.

The liquid in the chest in this case was dropsical. It was bilateral. As a rule, in hydrothorax not associated with general dropsy, the accumulation of the fluid is much greater in one side than in the other. I do not know that there is any rule for determining which side is likely to contain the most of the effusion, but it is a fact that we sometimes meet with cases of hydrothorax in which one side of the chest is almost filled with liquid, while there may be but a moderate amount upon the other side. Under those circumstances it is perfectly proper to aspirate, and it will be found that aspiration occasions no inconvenience, for the reason that the lung expands without difficulty, there being no lymph to restrain it, and it is comparatively a trifling matter to withdraw all the liquid at once. This patient was relieved by that operation. He now shows, as you see, considerable œdema, more upon one side than upon the other. There is considerable œdema of the lower limbs. He has the same marked pallor of the skin mentioned in the history, indicating anæmia. The belly contains liquid, but so far as we may judge, not in proportion to the general dropsy. We obtain signs of fluid there very distinctly. To determine that, one of two ways may be employed. First, place one hand on some part of the abdomen, and with the other percuss on the opposite part—diametrical percussion, as it is sometimes called—and feel a sense of fluctuation; or, second, we may practice what is sometimes called peripheral percussion. I will not detain you by explaining the physical signs of fluid in the pleural cavity, as I feel quite sure you know them already.

From this history we may assume at once that the patient has some chronic affection of the kidneys. It evidently dates back as far as April, although he continued at work several months afterward.

Now comes the question, what is the probable variety of renal disease which exists in this case? Is it that variety which is represented by the

large white kidney? Is it the waxy kidney? Is it the cirrhotic or contracted kidney?

"The large white kidney." Yes, I present the case as one of the large white kidney. Taking all things together, I think we have the signs which are distinctive of that variety, and that is the reason I present the case to you. Dropsy is generally a very common symptom of this form of renal disease, and anæmia is a very prominent symptom. Now, we may explain those two circumstances pertaining to this form in this way: there is a great loss of albumen going on. First, we here lost forty per cent., then eighty per cent. We can understand how that impoverishes the blood, how it reduces the number of red blood corpuscles, which are dependent in some way or other upon the presence of albumen. We can understand how the blood, diminished in density, undergoes exudation more readily; so we can explain the anæmia and the dropsy in a great measure by the loss of albumen. Some years ago I studied, analytically, a number of cases of Bright's disease, and that was one of the points that I raised in my mind, and I found that as a rule the amount of dropsy and the evidence of anæmia was in proportion to the amount of albumen found in the urine. You can lay that down as a principle.

Enough urine is being eliminated, you say, so that he is not likely to manifest symptoms of uræmia, unless we consider the loss of appetite such a symptom; but that is a symptom accompanying so many conditions. In this case we need not impute that simply to the retention of urea.

Now, with regard to the therapeutical indications. It is an object to get rid of this water, and yet that is not so much an object as to justify us in using such vigorous measures in effecting it as to impair the digestion, the assimilation; for, although we would like to see his limbs assume their normal size, yet that condition does not of itself produce any important ulterior or immediate consequences. Diuretics in cases like this should certainly be tried, but they are very likely to prove ineffectual. The dropsy is diminished more certainly, more promptly, by the use of hydragogue cathartics. Here is a practical point. A hydragogue cathartic which acts pretty briskly and within a tolerably short period will not impair the patient's strength much, if at all. Resort to these from time to time, but do not follow them up too constantly. In the meantime try to build up the patient by tonic remedies. The muriated tincture of iron is one of the best tonics. Give the patient as nutritious a diet as he is capable of taking; a little alcoholic stimulant, in some form, if it be found to agree with him. Those are the measures of treatment. Do not keep working on the bowels every day and all the time, because that measure of trying to remedy the dropsy conflicts with the still more important measure of improving the general condition of the patient. Take another case, where the object is a different one, though the measures to be employed are the same; a case of uræmia; the object being to eliminate the urea, due, for instance, to contracted kidney, in which there is, perhaps, no dropsy. You will be thinking in such a case that it is important for this patient that the urea should not be retained, and so you may want to be prescribing hydragogues and diuretics all the time, and you may do harm by too great a pertinacity in the use of these measures. Be guided by the indications; be guided by the quantity of urine and the specific gravity, and by the symptoms which denote or do not denote the existence of uræmia. The quantity of the urine and its specific gravity will enable you to judge pretty fairly whether the patient is eliminating enough to be safe. If there be present no symptoms of uræmia, you have an additional proof that there is no immediate indication for the use of potential measures to get rid of urea in other directions than the kidneys.

Œdema Glottidis.

One of the cases, gentlemen, which I intended to present to you to-day cannot be presented, for the reason that he is no longer in this world. But it is a very instructive case, and I propose to occupy a few moments in reading the history of it. It is the case in which there occurred in connection with suppurative inflammation of the neck externally, œdema glottidis. I did not make a visit to the hospital yesterday, but the day before I found this patient here, and there had occurred œdema of the glottis in one side. It was determined by means of a digital examination. Embarrassment of the respiration was so great at one time that it was thought it would become necessary to perform tracheotomy. However, the symptoms were relieved, and he was entirely relieved day before yesterday. I wanted to present the patient with reference to bringing before you the evidence of œdema of the glottis and practical points connected with it. I learned this morning that the patient died. I will read the history.

He was a man thirty-five years of age, a native of Ireland, admitted into the hospital on the 7th of last month. About two weeks before he fell and struck on the back of the head, receiving a slight wound, which healed readily. He felt no inconvenience until about a week afterward. There was a stiffness of the neck and a swelling behind the ear, the latter steadily increasing. There was inability to open the mouth wide. On admission there was swelling on the left side of the neck, extending downward and backward from the angle of the jaw and also behind the ear. It was firm, not very tender, and was thought to be an enlargement of the parotid gland. Inside the fauces were apparently normal, but it was impossible to get his mouth open wide enough to see the throat well. He gave no history of syphilis, and no evidences of that disease were found. The swelling was painted with iodine, and the iodide of potassium and bichloride of mercury were given internally. The skin becoming tender, the iodine was discontinued and the oleate of mercury used. Some œdema of the skin occurred, and there seemed to be deep-seated pus, which became quite evident after applying poultices. Early in the morning of day before yesterday the orderly reported that the patient was dying. He was found greatly cyanosed; threw himself about, struggling violently for breath. The difficulty seemed to be most with inspiration. On pass-

ing the finger back into the fauces, a firm, smooth, rounded tumor was felt on the left side. (Please recollect that important practical point in making a positive diagnosis.) An incision was made about four inches below the ear, at the lower portion of the deep-seated fluctuation, and pus was evacuated to the amount of about two ounces and a half. This relieved the immediate symptoms of pressure, and he breathed after that much more easily. During the next day there was some embarrassment of respiration, but he breathed comparatively well. Toward evening, however, the respiration became more embarrassed, and the question of performing tracheotomy was raised. It did not seem then to be necessary. About two o'clock in the morning he was reported to be dying. He was lying apparently dead; pale, no evidence of congestion; respiration apparently had ceased; no pulse, a faint heart beat. Tracheotomy was performed; the wound was kept open with the forceps; artificial respiration was employed. After five minutes he began to breathe with great difficulty, of himself, and the blood returned to the face. The tracheotomy tube was then procured, with which to keep open the wound. He became delirious, threw himself about so violently as to require three or four men to hold him. He never became conscious afterward. This continued about an hour. A hypodermic injection of morphia quieted him somewhat. He breathed freely through the tube, but the cerebral symptoms of carbonic acid poisoning never disappeared. He was unable to swallow, and was fed by passing a catheter down the throat and per rectum. He improved somewhat; the pulse became better, he breathed freely and easily, but about 2 P. M. there were signs of irritation of the cord; the neck was drawn back, as in cerebro-spinal meningitis, there was twitching of the muscles of the face and arms, and from that on his condition became worse, the heart more feeble, less regular, and he died this morning about 4 o'clock, apparently of exhaustion.

This is a very interesting and instructive case. While speaking on the subject of œdema of the glottis, in the didactic course, I endeavored to impress the point that there is liability to a sudden increase of the œdema, which may destroy life very quickly indeed; and that is a very important fact to bear in mind. Although in this case the patient was in the hospital, yet before tracheotomy could be performed, there being no delay, the respiration had ceased. Still, in this instance, by employing artificial respiration, life was restored, and the man finally died, not because the operation of tracheotomy was unsuccessful, but from the effects of the carbonic acid poisoning, which had reached so great a degree before respiration was reëstablished.

Editorial Department.

Periscope.

The Laryngeal Complications of Consumption.

Dr. James H. Williamson contributes a valuable paper on this subject to the *British Medical Journal*. The existence of laryngeal complications in a case of phthisis indicates that the case has become, even if it were not at first, a constitutional one; and the new malady, like the cerebral and intestinal complications which also occur, is one of its local expressions. Men are much more subject to the laryngeal complications than women. Out of five hundred cases of consumption which he observed consecutively, no more than thirty-four complained of laryngeal trouble, equal to 6.8 per cent. It must, however, be remembered that this complication is mostly found in advanced cases; taking, therefore, none but fatal cases, he found that in one hundred and six there were 25, equal to 23.6 per cent., and Louis, in his post-mortems, found some portion of the tract ulcerated in 33.2 per cent. Symptoms are not always present, but when they are, they will generally furnish indications as to what part of the tract is involved. When there is heat and pricking low down in the throat, with dryness and dysphagia, we suspect inflammation or superficial abrasions about the epiglottis, or in the folds of mucous membrane running between it and the tops of the arytenoid cartilages. Great supra-thyroid pain, with burning and marked dysphagia, and with pain shooting up to one ear, will point to acute inflammation or deep ulceration of such parts. The dysphagia is greatest when the angles of the epiglottis and the aryteno-epiglottidean folds are involved. Pricking in the box of the larynx, with hoarseness or intermitting aphonia and semi-laryngeal cough, most often depend upon thickening or inflammation of one or both cords. Supra-sternal pain, constriction, or perhaps spasmodic dyspnœa, generally none of them very positive, will give hints of inflamed spots, thickened patches or ulcers of the trachea. In his experience, ulceration never exists in the larynx unless the pulmonary phthisis has reached the stage of excavation. In making a diagnosis the laryngoscope will eliminate hysteria and paralysis of the vocal cords. If chronic laryngitis coexists with pulmonary phthisis it is proper to associate the two pathologically. In syphilis the larynx is affected in only a very small proportion of cases; according to Mr. E. C. Morgan only 4.8 per cent. Primary laryngeal cancer is very rare. If the general and local signs are taken together, there should not be any insuperable difficulty in diagnosing between syphilitic, cancerous, and tubercular disease of the larnyx. So far as the ultimate prognosis is concerned, it is simplified by the appearance of the laryngeal complications, for they are a sign that the patient's tether of life is not a long one, even for consumption. The treatment must be aimed at their arrest, which will be accomplished by sedatives and rest. A sedative night draught should

be resorted to from time to time; thirty minims of the solution of hydrochlorate of morphia for a few consecutive nights will give good results and do no harm. Where dysphagia is prominent, ice to suck before medicine and food will be of service and the night medicine may be given hypodermically. Small doses of morphia may be given during the day. Outwardly, poultices or spongio-piline, wrung out of hot water and well sprinkled with laudanum, must be applied over the affected sore. A few drops of Battey's solution in the ear have often given relief. Inhalations of steam, medicated with a mixture of chloroform, compound tincture of benzoin, and juice of hemlock, are of service. This sedative treatment must be continued for a long time. In latent or chronic cases over treatment will excite, and it is well to do but little. If accessible, paint the surface once, not oftener than twice, a week with nitrate of silver solution (twenty-five grains to the ounce). When out of reach use the same solution by means of an atomizer (one to two grains to the ounce). The stimulant and alterative action of the silver salt may be varied with the stimulant and astringent action of sulphate of copper (fifteen grains to the ounce). Externally, counter irritation must be used. Great attention must be paid to diet.

Experimental Biological Research.

The *British Medical Journal* furnishes the following interesting statistics. It says the reports of Mr. Busk and Dr. Thornley Stoker, showing the number of experiments performed on living animals under the Act for Regulating Experiments on Animals, during the year 1881, have been published as a Parliamentary paper. Mr. Busk reports that the total number of experiments performed during the year in England and Scotland, by the thirty eight licentiates, was about 270. Of these, 59 were performed under the restrictions of the license alone; 90 under certificates permitting experiments (with anæsthetics) in illustration of lectures; 29 under special certificates for experiments without anæsthetics; 92 under certificates dispensing with the obligation to kill the animal before recovery from an æsthetics; and one under a certificate permitting experiments on "cats, dogs, horses, mules, or asses." The only experiments in which it is likely that any appreciable suffering would be caused, are among those performed under the certificates of the last three descriptions. In all the experiments under the first and third of these heads the only operation consisted either in simple inoculation with a morbid virus, or in its introduction by hypodermic injection; the proceeding in either case being no more painful than the prick of a lancet or needle. Of the experiments under the second head, 68 also consisted in simple inoculation with a morbid virus, or the introduction by hypodermic injection of various substances of a poisonous or medicinal character. In most of the inoculation experiments no effect was apparently produced; while in those in which the inoculation took effect, either death speedily ensued or the animal was killed after a very brief interval. This was the result in about twenty or twenty-five cases, among which are included eight (seven mice and one frog) caused by poison in the prosecution of a recent criminal investigation (the Lamson case). In the other experiments of different kinds performed under the certificates dispensing with the obligation to kill before recovery from anæsthetics, the only pain caused would be that attending the healing of a wound and the necessary confinement, or in some cases produced by the action of drugs administered. The number of cases in which trifling suffering of this kind was caused might be ten or twelve. As in the experiments performed under the license alone, or under certificate for lecture illustrations, the animals are placed and kept in a state of anæsthesia, no pain need be inflicted; and Mr. Busk has every reason to be assured, as regards the due administration of anæsthetics, that the provisions of the Act are fully carried ont. Of this he has on several occasions had an opportunity of satisfying himself from personal observation. He therefore states with confidence that, during the past year, no case has arisen in which it was found necessary to inflict pain, except of the most trivial nature, in the prosecution of scientific inquiry. Dr. Stoker's report for Ireland is of a similarly satisfactory character. He reports that under the licenses twenty-seven experiments were performed, "all of a highly useful character, being designed to elucidate the actions of drugs, or to throw light on questions of surgical and medical pathology." Dr. Stoker is of opinion that in all cases those persons qualified to experiment under the Act have conformed to its directions, and have observed all possible humanity in their investigations, and that no appreciable suffering has been caused to the creatures experimented on.

Neuro-dynamic Medicine.

Dr. B. O. Kinnear contributes an interesting and valuable article to the Boston *Medical and Surgical Journal*, on Dr. Chapman's system of neuro-dynamic medicine. This system consists in the theory that ice in disease, used properly, in rubber bags of the right length and width, over the spinal and sympathetic centres, dilates the arterioles controlled by such centres, and arrests at the same time hypersecretion from the glandular system, checks spasmodic and irregular muscular movements of voluntary and involuntary muscles, and arrests hypernutrition by its sedative action upon trophic centres. Heat used likewise acts in an exactly opposite manner. He has been able to relieve the pain of neuralgia, in some cases by ice and others by heat, as quickly and in many instances more rapidly than by hypodermic injections of morphia. Besides the swift relief afforded, this method of treatment has the additional advantages of not producing nausea, vomiting, headache or any other bad symptoms. In a case of agonizing pain from passage of gall stones, ice was applied over dorso lumbar region, and in *three minutes* all pain and tenderness had disappeared, whereas in previous attacks morphia had been wholly inadequate to relieve the suffering. In wind colic, applied over the same region, it will give immediate relief. It will relieve bilious attacks and sick

headache when applied over same region. In acute diarrhœa it will check the bowels, allay vomiting if it exists, and in the severer forms will restore warmth to cold and cramped extremities. In the vomiting of pregnancy, carefully used, it promises much. In gastritis, in simple leucorrhœa, and in constipation, he has used it advantageously. He has derived excellent results in hysteria from the effect of ice in subduing the hyperæmia of the sympathetic ganglia, and those spinal centres which give rise to the muscular spasm when unduly excited, as in these cases. In sleeplessness due to excessive use of the brain, from almost any cause, ice applied low down (dorso-lumbar region) will produce sleep by dilating the arterioles of the lower body, thus withdrawing from the cerebral circulation its excessive supply, the cause of the sleeplessness. When the ice is not sufficient, thus applied, to have the desired effect, a double-columned hot water bag may be used over the sympathetic ganglia of the cilio spinal region of Chapman, or, in other words, the cervico-dorsal vertebræ, and will assist, by stimulating these ganglia, to a hyperaction, causing thereby a contraction of the blood vessels of the brain. He used it with benefit in one case of asthma.

Dr. Kinnear, in conclusion, says: "I would again suggest to those of my medical confrères who may decide to try this method, not to do so without a careful attention to those *dangers* with which a careless or ignorant application will certainly bring them face to face. Upon these *dangers* Dr. Chapman gives very clear and minute directions and cautions."

Venesection in Heart Disease.

In the *Lancet*, Dr. Bedford Fenwick, in the course of an interesting article on this subject, says that his attention was first called to the value of venesection in heart disease by a mere accident. A young man was admitted into the hospital with mitral stenosis and aortic regurgitation. His condition became gradually more and more critical until he became drowsy, almost comatose, and his death was hourly looked for. When in this condition he threw up his arm, and striking his nose violently, it began to bleed very freely. Attention being called to another patient, his nose was allowed to bleed, thinking that it would soon stop. He lost some twelve or fourteen ounces of blood, and when again examined was found perfectly conscious, breathing quietly, and calmly said that he felt much better. His improvement was uninterrupted, and in a few days he returned home. Loss of blood is a common cause of fatty degeneration, therefore it would not be wise to bleed where we have or fear fatty degeneration.

Dr. Fenwick only uses leeches or cupping to remove blood directly from the cardiac region in cases where stenosis exists. He imagines that we obtain thereby more certain and more rapid results with a more accurate loss of blood than when venesection from the arm is resorted to. Still this is a matter of such great practical importance to the patient's welfare and to our own success, that he feels bound to state distinctly some reasons for his judgment: 1. The patient and the patient's friends usually object less when leeching or cupping is suggested, than when "bleeding" is proposed, and they are less alarmed at a local application to the seat of disease than at the procedure necessary to open a vein and keep it bleeding. 2. The quantity of blood to be abstracted can be more accurately measured and controlled, and is generally much more easily obtained, in cases of advanced stenosis, by local than by brachial venesection. 3. Even as, like all practical men, he gives a hypodermic injection of morphia at the seat of pain, although he cannot explain why its insertion there should give so much greater and more rapid relief than when introduced into the same blood at a distance, so he cannot explain why a little blood removed from the cardiac region should afford greater and quicker relief than is derived by the abstraction of even a somewhat larger quantity from the arm. He does the former and leaves the latter undone in these cases, because he is convinced of the great practical truth that thereby greater good is gained.

He has been astonished to find how drugs which had been given for days or weeks without apparent benefit, as soon as even a little blood has been removed, seem at once to assert their power again. Next, with regard to acute pericarditis and endocarditis, he has not had the opportunity of using venesection in many such cases, but where he has done so he has invariably bled by cupping the cardiac region, and always with good result—so successfully, indeed, as to make him believe that if this measure be taken at the onset of the disease it will very often, if not always, cut the attack short, or at least greatly mitigate its severity."

Finally, with regard to pain, more or less severe and more or less persistent in the cardiac region, he has found nothing give such rapid and complete relief as local abstraction of blood. In conclusion, he summarizes thus:—

1. In cases of valvular stenosis, if dyspnœa, or pain, or urgent symptoms be present, bleeding is generally useful; that it appears to be better to bleed often, if necessary, but to take only a small quantity each time, and this by means of leeches or the cupping glass, direct from the cardiac region.

2. In cases of valvular incompetency, if urgent dyspnœa or cyanosis or stupor be present, it appears best to bleed freely from the arm, to about sixteen or twenty ounces, if necessary, and if possible once for all.

3. In cases of acute pericarditis and endocarditis the attack may possibly be cut short by freely cupping the cardiac region at once.

4. In cases of cardialgia, without any evident cause, leeching or cupping over the heart's area will probably give relief.

Reviews and Book Notices.

BOOK NOTICES.

The Humboldt Library of Popular Science Literature. J. Fitzgerald & Co., New York City.

The publishers issue standard short essays on various scientific subjects, at the nominal rate of

15 cents each. The books are well printed, on good paper and in clear type. Some of these essays which might interest physicians are, "Mind and Body," by Alexander Bain; "Longevity," by John Gardner; "Lessons in Electricity," by John Tyndall; "Hereditary Traits," by Richard A. Proctor; "Oriental Religions," by John Caird, etc. The address of the publisher is 30 Lafayette Place, and any of these are mailed to the purchaser who remits 15 cents.

Labor Among Primitive Peoples; Showing the Development of the Obstetric Science of To-day, from the Natural and Instinctive Customs of all Races, Civilized and Savage, Past and Present. By Geo. J. Engelmann, A.M., M.D. St. Louis: J. H. Chambers & Co. pp. 202. Cloth. 8vo. Price $2.00.

Dr. Engelmann shows, in this work, that he is both a finished obstetrician and an ethnologist of close and extensive reading. Its pages are full of curious information, and the practical lessons drawn from a study of the customs connected with lying-in and birth in different ages and nations, are deserving the attention of every scientific accoucheur. One of the most unexpected results discovered is that observation and instinct have taught many savage people methods of the management of labor which, as the author remarks, "that only within the last few years are the most alert of our obstetricians in a position to compare with them."

It is especially in "massage and expression" that this is true, and the extent to which these plans of facilitating labor are used by primitive people testifies to their value.

The volume is illustrated with fifty-six woodcuts and a photograph, showing scenes of labor in ancient and modern times, the position of the patient, and the assistance rendered.

Lacerations of the Female Perineum and Vesico-vaginal Fistula; their History and Treatment. By D. Hayes Agnew, M.D. 75 Illustrations. pp. 141. Philadelphia: P. Blakiston, Son & Co. Paper 75 cents.

Of the two subjects here treated of, the first occupies fifty-six pages, the second, the remainder of the volume. Much of the space is taken up with descriptions of instruments and minute directions for the operations. Upon a strict observance of these minutiæ the success of the surgeon will depend. Dr. Agnew's statistics are good. He tells us that he has operated for vesico-vaginal fistula about sixty times, with three deaths, all doubtless due to a hospital atmosphere, and with not more than four or five failures.

Dr. Agnew's views about perineal lacerations are important. He does not divide the sphincter, and does not use the quilled suture. He cures the laceration of the perineum and recto-vaginal septum at a single operation, and by a peculiar method of inserting the first (interrupted) suture he does away with the necessity for a series of stitches to close the septum independent of those used for the closure of the perineum.

Mental Pathology and Therapeutics. By W. Griesinger, M.D. Translated from the German by C. Lockhart Robinson and James Rutherford, M.D. New York: Wm. Wood & Co. 1882. (Wood's Library of Standard Medical Authors).

Griesinger belonged to the last generation of German psychologists, and this translation of his treatise was published in England fifteen years ago. Since then psychiatry has taken a different direction, and although no one can fail to learn something from a perusal of Griesinger's half metaphysical doctrines, it would be a grave error to suppose that they are now current. Mental pathology has received vast accessions from histology, which Griesinger knew nothing about. The basis of the study of mind and of the distinctions of its morbid states is now seen to be, in the most direct sense, the body. The author was, however, an acute observer, and remarkably well acquainted with the literature of his specialty.

Cerebral Hyperæmia; Does It Exist? A Consideration of some Views of Dr. William A. Hammond. By C. F. Buckley, B.A., M.D. New York: G. P. Putnam's Sons. 1882. 12mo. Cloth. pp. 129. Price $1.00.

Dr. Buckley, who was at one time superintendent of an English Asylum, makes a vigorous onslaught on Dr. Hammond's theories about cerebral hyperæmia and anæmia, with which the profession is familiar. Many of the critic's objections are well founded, and if Dr. Hammond still upholds those theories, he will have some difficulty in meeting the objections. The tone of the writer is at times too controversial, inclining to personalities, which rather injures the weight of what he says.

Handbook of Ophthalmic Practice. By Charles Higgins, M.D., F.R.C.S. Second Edition. Revised. Philadelphia: P. Blakiston, Son & Co. 1882. 12mo. pp. 116. Cloth. 50 cents.

This is a very brief description of the principal diseases and injuries of the eye; too brief for most purposes, but, perhaps, of some advantage to the student in running over the subject in view of an examination. Its brevity is the only objection we have to it. Otherwise it is well written and the doctrines sound.

THE

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THE NEGLECT OF THE STUDY OF PURE SCIENCE IN AMERICA.

The word *practical* is in undeserved honor among us. It is supposed to be the highest compliment that we can pay a book or a man to say that it or he is "eminently practical." The tradesmen have caught it, and we see in the streets the signs of "practical bootmaker," "practical carpenter," as if to draw a distinction against others in their callings who ply their trade in a theoretical manner only.

This is a great mistake. The practical man, practical pursuits, practical purposes, mean such as are directed to the accomplishment of known and narrow aims. Were all men practical we should fall into a condition of Chinese fossilization. Our salvation lies in the contemned unpractical men.

Nowhere is this more obvious than in science. Directed to solely practical ends, science makes but little progress. Those who have given it its greatest impulses are they who pursue it for its own sake; they who are seekers after its abstract truths, without caring whether these can be applied to the everyday wants of life or not.

Nor is the science of medicine any exception to this. Those who most deserve our thanks for discoveries in it have not been those whose first ambition was to get a "big practice," but rather whose enthusiasm was for knowledge more than for fame or money.

But, alas! How few of these there are anywhere in the world! Least of all do they flourish among us. And when a young man is willing to devote himself to this noble but arduous path, how little encouragement he has from any quarter!

In Europe there are foundations and fellowships, chairs in the universities and government aid for men of promise who wish to study abstract science. But where are any such helping hands among us?

The meagre appropriation of late years granted by Congress to the National Board of Health is now withdrawn. The Medical Colleges give out their chairs on other grounds than the love of science. Fellowships and foundations are practically unknown. In fact, there is nowhere any provision made to aid the student who would spend his whole time in the search for abstract truth.

The result of this is sure to be unfavorable. It lowers the mark for endeavor and depreciates the standard of thought. More and more is medicine looked upon as a mere trade, as a means of getting a living and making money. Even now, those who still retain some scruples about reducing it to the ordinary ethics of a trade-union are looked upon as behind the times, or eccentric.

Hospital positions are manipulated to increase private practice; books and essays are run through the press, not to instruct others, but as baits to fish for patients; novel instruments and operations are brought forward, not for their intrinsic value, but that the inventor may get ahead in the world. Rule out of our literature all that is written from such motives, and how little would remain?

The remedy for this is to uphold the supreme importance of the pursuit of abstract science, of

those studies which have no practical aim, but seek the truth alone. Award to these dignity and the highest place, which is theirs of right, and we shall do much toward infusing a nobler spirit in all who pursue our science.

REST IN TREATMENT OF HEART DISEASE.

By this we mean not positive, but comparative rest; neither do we refer to acute inflammatory affections of the heart, wherein, from the very gravity of the disease, confinement to bed and consequent rest become necessarily assured. We are thinking of those cases of heart exhaustion, so to speak, of individuals whose general health and tonicity is much run down, from overwork or abuse, and in whom the heart shares in this general vitiation. Possibly the organ is not in itself diseased; its organic integrity may be perfect, but its muscular walls may be flabby and weak, ready to yield to, or, more properly, unable to resist, any great strain. If, when in this condition, the man resorts to any violent muscular exercise, or subjects himself to the influence of violent physical emotions, this weak heart may become mechanically distended, in its efforts to perform the extra labor demanded of it. Or it may be that dilatation has already taken place to some extent; then does it become important to allow the organ time for the development of the beneficent hypertrophy that will do so much to preserve its integrity. By rest, we mean to advise your patients who are threatened with or already have dilatation of the heart to do everything slowly, to perform every act of life deliberately, and to avoid, as far as possible, all occasions calculated to excite the passions or emotions. We must ever remember what a delicate machine the heart is, and how easily it can become deranged, and realizing this, must consider how much more care this organ requires when it is already diseased. We must, under such circumstances, walk slowly, think slowly, eat slowly, in a word, do everything slowly. It is not well, and we do not recommend the carrying of this advice to the verge of laziness; but what we do mean is, that while it is well for all (either sound or diseased) to avoid hurry, it is ten times more important, aye, absolutely imperative, for the man with a weak or diseased heart.

Notes and Comments.

Resection of the Pylorus.

In a correspondence to the *Wiener Med. Woch.*, Dr. Anton Wölfler, in Vienna, mentions, in regard to the results of the resection of a carcinomatous pylorus, that the woman on whom he performed this dangerous operation one year ago was living in a "splendidly nourished" condition; that all subjective complaints have ceased, and that the repeated and careful examinations have proven to an undeniable certainty that no recurrence of the malignant growth, either in the stomach or in the neighboring lymphatic glands had taken place. He also tells us that the second patient on whom Billroth operated for the same cause, October 29, 1881, was "perfectly well, looked strong, and is happy to be able to return to her usual occupation without any disturbance or impediment whatever."

These are results that should stimulate us to new exertions; the operation is not alone justified, but in proper cases even strongly demanded. "May it," concludes Wölfler, in his letter, "succeed right frequently, to the benefit of the human race and to the honor of the medical profession."

American Dyspepsia.

In the Boston *Medical and Surgical Journal*, Dr. James H. Robbins takes the ground that the prevalence of dyspepsia among us is due less to improper food, badly prepared, to haste in eating, or to excessive eating, than to the fact that we nearly all are the possessors, either by inheritance or acquirement, of imperfect nervous organizations that are consequently unable to lend their aid to digestion as they should; for this reason but few of us are able to digest enough food for our bodily repair; hence we experience the sensation of having over-eaten, when in reality we have not had enough. The author says:—

"Such causes operate with special power upon us of the present generation of the Anglo-Saxon race, whose ancestors came to this country several generations ago, for the reason that from these ancestors we inherit nervous systems of impaired vigor. Our parents and grandparents were so strenuously engaged in an arduous, ambitious, and competitive endeavor, amid the

rapidly changing conditions of life in a new country, to secure competency and respectable social position, that they expended, to a great degree, their own vital powers, and have accordingly transmitted to their children delicate and neurotic constitutions. If it is granted that we inherit a diminished vitality, it is easy to see how ingeniously the pressure, the wear and tear, the strain, the excitement, the hurry and worry incident to this breathless, bustling life of ours, affect the nervous system. It is also evident that impairment of digestion and mal-nutrition must be the certain result of such a condition of things."

This deterioration of the nervous system is fostered and increased by our faulty methods of raising children and our own erroneous style of living when we reach maturity. The evident remedy is to be found in an elevation of the tone of the nervous system. Whether this theory be true or not, it is a very charming one, and would certainly seem to account for much of the dyspepsia that renders so many persons miserable.

Temperature in Cardiac Disease.

The *Lancet* says a monograph upon the above subject has recently been published by M. Sabatier. His researches embrace the determination of the local temperature of the præcordia, as contrasted with the axillary temperature. He states the normal temperature of the præcordial region as 36.1° C. (about 97° F.), liable, however, to variations in different subjects. In pericarditis the axillary temperature is much raised in acute cases, but not influenced in chronic and subacute cases. The præcordial temperature is increased in acute and subacute pericarditis, but where there is much fever, as in acute rheumatism, the præcordial temperature is lower than the axillary. When the local inflammatory process is very intense this difference may be reversed. When right-sided pleurisy coincides with pericarditis, local thermometry indicates the relative intensity of the two inflammatory processes. During endo-pericarditis the local temperature does not subside so soon as the general. In endocarditis there is no local rise in temperature, a point of distinction from pericarditis. In cardiac hypertrophy the præcordial temperature is the same as, and sometimes lower than, that of the opposite side. Vesication applied to the præcordia keeps the temperature at a high level for several days. Numerous tracings are given, and, although the subject is limited, and, perhaps, hardly sufficiently fruitful, considering the labor expended upon it, it is the first contribution to local cardiac thermometry that has been made. The author believes that the method is a valuable aid to diagnosis, and that the local temperature of the cardiac region should always be estimated. It is of most importance at the close of the acute period, when the axillary temperature has become normal.

Peculiar Attacks in a Case of Locomotor Ataxia.

Drs. Raymond and Oulmount observed peculiar attacks in a patient suffering from tabes. Dr. Bernhardt gives us, in the *Centrlb. f. d. Med. Wis.* 9, 1882, p. 160, the following description:—

The patient awakened suddenly, usually in the night, with a violent desire to micturate, but passed a few drops only; a most intense pain seemed to tear his urethra apart. This paroxysm lasted from one to two minutes and returned every fifteen to thirty minutes. The duration of the whole seizure was generally from ten to twelve hours; toward the close, the poor sufferer passed a few drops of pure blood; the attacks then ceased, but nearly the whole of the following day the urine was somewhat bloody.

Such crises usually happened then, when the lancinating pains in the lower extremities had been of a specially severe character. If the patient continues in the recumbent position, the attacks are somewhat milder than when he is restless. Raymond and Oulmout remark that one should not forget to look for stone in the bladder in such cases, which the blood seemed to indicate. In this case no stone could be found.

Nuclear-muscular Paralysis of the Eyes.

The symptom-complex of this disease, as described in No. 16, III, 82, of the *Deutsche Med. Zeitung*, and as mentioned already by v. Graefe and others, is as follows:—

When the general health is perfect and not in the least disturbed, a gradually progressing paralysis of at least all the muscles of the eyes (levator palpebrarum, superior included) develops itself. The bulbi are at the same time becoming more prominent. Some muscles may, however, be more paralyzed than others. The movement of the pupil and the power of accommodation are always intact. When the disease has reached its acme, the eyes are perfectly motionless. The malady is incurable.

Dr. Lichtheim, in Bern (*Corr. Bl. f. Schw. Aerzte* 1, 2, '82), who seems to have given this subject special attention, believes the cause of this disease to be an isolated affection of the

motor oculi, of the abducens and the origin of the trochlearis, a lesion which affects uniformly a series of gray matters which are functionally connected with each other. He compares this complaint with bulbar paralysis (labio-glosso-pharyngeal paralysis), with which it has undoubtedly many points in common, only this eye disease never causes death. I. Hutchinson has observed seventeen such cases. Reports of post-mortem observations, with description of the brain, have not as yet been published.

Removal of Uterus for Malignant Disease.

In the *American Journal of Obstetrics*, Dr. T. A. Emmet reports the case of a woman, about fifty years of age, in whom, having made the diagnosis of cancerous growth just within the cervix, he decided to remove the uterus. He reached this conclusion because the general health of the woman was excellent, and he considered that he had encountered the disease in its early stage, which rendered such an operation justifiable. The womb was removed through the abdominal walls, and the bladder was unavoidably injured during the operation. To guard against peritonitis a coil of india-rubber tubing was placed on the abdomen, and according as there were rises of temperature ice water was made to flow through it. The patient died on the morning of the fifth day.

Diseases of the Eye Due to Masturbation and Sexual Excesses.

Prof. Herm. Cohn delivered a lecture on this subject in a meeting of the medical section of the Schles. Ges. f. Vaterl. Kultin. A report of this lecture is contained in the *Bresl. Aerztl. Zeitsch.*, III, 4, 82, and an extract of it in the *Deutsche Medicinal Zeitung*, III, 16, 82.

Cohn observed, in cases of masturbation, if practiced to excess, photopsia, conjunctivitis, blepharospasm and paresis of accommodation. Photopsia showed itself always as subjective light phenomena in young persons, the eyes of which represented a perfectly normal pupil, normal vision and tension, an intact sense of space, light and color, clear media, a perfectly healthy optic nerve and a normal retina. The patients had all kinds of phenomena. They saw spots, stars, light wheels, shining circles, or brilliant dots. In the majority these fata morgana ceased during darkness; in all, on closing the eyes. Of conjunctivitis Cohn saw six cases; blepharospasm due to masturbation generally attacked both eyes. If this contemptible habit may lead to amblyopia has not been demonstrated. Mooren already insists upon the relation between masturbation and paresis of accommodation. That glaucoma and morbis Basedowii happen in such cases has been mentioned by Förster and v. Graefe. In conclusion, Cohn recapitulates the view of neuropathologists concerning the dangers of this habit, and recommends as cure, convincing, by plain and public talking. The pupils, at a certain age, should specially be warned against it.

Erythrophleïn, a New Alkaloid.

Gallois and Hardy reported, some time ago, that they had been able to gain from the codex of Sassy (erythrophleum guineense) an alkaloid, erythrophleïn. Prof. E. Harnack, of Halle, communicates to the *Centralblatt f. d. Med. Wissensch.*, No. 9, 1882, the fact, that on further examination he had been surprised to find that this alkaloid unites the main effects of digitalis and picrotoxin; that it did not only possess the characteristic effect of the former on the heart, but causes also convulsions, due to irritation of the medulla.

This is of the more importance, as, so far, only substances free of nitrogen have been known to possess such an effect. Chemically, erythrophleïn is somewhat similar to atropia, especially as regards its products of decomposition.

Treatment of Fracture of the Femur in Children.

It is well known that Schede was the first who (1877) attempted the treatment of fracture of the femur in children of very young age (1 to 3 years) by vertical extension. Jarnbach (*B. Kl. W.*, 9, '81) condemned this procedure, saying that the permanent position on the back would cause affection of the lungs.

Dr. Herm. Kümmell, of Hamburg, reports now, in the *Berl. Kl. W.*, 4, '82, that he has treated 40 such cases, according to the method suggested by Schede, and he found that children, even badly nourished and under by no means favorable circumstances, had been able to withstand a permanent position on the back for as long as 111 days, without in the least suffering from it, as far as their lungs were concerned.

The *Deutsche Medic. Zeitung* specially mentions, in addition, that the result of this treatment in Kümmell's cases was excellent, as not a single case of dislocation in any direction, nor shortening of the fractured extremity, was observed, and recommends, very properly, the general adoption of Schede's method in all cases of fracture of the femur in very young children.

Acute Rheumatism and Salicylate of Sodium.

At the meeting of the Society of Physicians of Nieder-Œstreich (February, 1882), Dr. M. Heitler mentioned his experience in the treatment of acute articular rheumatism with salicylate of sodium. He found its action the most rapid and favorable in very acute and violent cases, while in such as run a more protracted course the remedy was far less reliable. The doses administered must not be too small, and have to be frequently given. He advised a daily dose of 160 grains to be given within five hours; every hour 32 grains. When the symptoms decline the remedy should be employed the same way one day longer. The complication of endocarditis is in no way affected by this remedy. How the pulse is the guide, when to decrease the doses, we mentioned in a leading article on salicylic acid, some time ago.

A Marvel of Surgery.

Dr. Roswell Park, of Chicago, reports a marvelous case that he has recently seen in Prague. The great surgeon, Gussenbauer, more than a year ago removed the larynx and epiglottis of a patient suffering from cancer. Six weeks afterward he began to wear part of the artificial larynx, and after accustoming himself to this, he gradually learned how to introduce and use the reed which takes the place of the vocal cords. The patient is a riding teacher, talking a great deal, and does not suffer the slightest inconvenience or pain. His voice is monotonous, but his enunciation excellent, his speech perfectly intelligible, and he eats and drinks with perfect facility. Three intra-laryngeal operations had been previously made before Gussenbauer attempted his feat.

Tumor of the Cortical Substance of the Brain.

The *Pesther Med.-Chir. Presse*, No. 46, reports a very interesting case of a tumor of the cortical substance of the brain, presented by the Med. Corr., Prof. Wagner, in the University Clinic.

The tumor, of the size of a walnut, and apparently tubercular in character, was found in the left upper temporal lobule, and had caused softening extending to the posterior central convolution. The symptoms, which had been observed during life, and which may be ascribed to this tumor, were the following: Awkwardness and debility in the movements of the right hand, and two attacks of convulsions, beginning both times with spasm of the same hand. The second of these paroxysm, a very violent one, caused the death of the patient.

Correspondence.

Digitalis and Aconite.

Ed. Med. and Surg. Reporter:—

In your journal for June 3d, 1882, you give a short but interesting article on digitalis and aconite, which forcibly reminds me of my experience with those drugs.

The therapy of digitalis and aconite, as I got it thirty years ago, while a medical student, was of such a demoralizing nature, that I was for a long time deterred from the use of those valuable medicines; and as there are others, perhaps, in the same condition, I will, for their benefit, give a brief statement of the results of my use of them.

Lectures and text books of the time of my student life seemed more for the purpose of frightening the young physician than teaching him their properties.

The "cumulative" action of digitalis and the powerfully depressing properties of aconite received much more attention in the lecture room than all else of their therapeutical properties.

The pharmacy of those drugs has improved as much or more than has our knowledge of their therapy, and their bad or uncertain effects are more attributable to the improper time of gathering, and the place and manner of their preparation for use, than to any real want of uniformity of action.

The *German tincture* and the "*specific*" tincture of the Eclectics are the only preparations of either that I use; other preparations may be reliable, but finding those to always give responsive action, I use no other.

During the last ten years I have used digitalis a great deal, for the amount of general practice done, and perhaps in all the abnormal conditions of the heart in which that drug is indicated, without a single bad effect, except that all the cases did not recover; nor do I remember a case in which the physiological effect of the drug did not obtain.

In the intermittent or remittent pulse of cardiac disease, or in that of fevers, digitalis will give regularity to the circulation. And so uniformly does that result obtain that I look upon it as a heart tonic, as reliable as bark, and its salts are antiperiodics.

And so sure and steadfast are its tonic effects upon the circulation, that, were I to permit a typhoid case to enter the third week without digitalis I would feel that I was doing him great injustice.

I do not use it as, or believe it to be, a sedative at all like veratrum or antimony; yet it will "slow" a quick pulse, but it is the quick pulse of debility.

If small doses, at short intervals, is the better way to use any medicine—and I think it true of most all—it is preëminently true of the two under consideration.

Of digitalis, I do not remember to have given more than two drops of the above preparations,

or more frequently, in that dose, than every two hours. its effects obtaining in twelve hours, sometimes much sooner.

In anasarca and ascites, conjoined with apocynum, it has in every instance given relief. In the bronchitis of the old, or very feeble of any age, with aconite, it is invaluable. Indeed, the whole therapy of digitalis may be summed up—and I dismiss it with this remark—it is indicated, and will give good results in all cases of feeble circulation.

An old gentleman of this place, with a complication of cardiac disease; effusion so great he could not lie down (pleural effusion as high as the nipple on both sides); so imminently perilous was his condition, we telegraphed to New York for an aspirator, but at once put him to taking digitalis and apocynum. In thirty-six hours improvement began, and before the aspirator came—some five days—he could lie down in comfort, and though the case terminated fatally several months after, he got those several months through by the supporting properties of digitalis. Other cases could be given, like his, but it is unnecessary.

Let me impress it upon the young physician, for whom this is especially written, yea let me emphasize it, give digitalis in small doses, and you need have no fears of "cumulation."

Dr. Fothergill, of England, has recently called attention to what he says is true—I have not seen it—that after your patient has been under the influence of the drug some time, a sort of paralysis of cardiac muscles takes place; that very pathological condition digitalis is wont to remove.

My friend, Dr. C. M. Sebastian, of Martin, Tennessee, stated, a few days ago, before the West Tennessee Medical Society, of which he is vice president, that recently he had a patient taking digitalis, in whom that condition obtained, which condition passed off on the discontinuance of the drug for a while, to have its good effects on its resumption, and so pronounced did the symptoms become of the paralyzing effects, that the patient learned himself when to discontinue it.

Is it not most likely that the paralysis that Dr. Fothergill speaks of is that condition that used to be, and is yet, called the "cumulative?"

In regard to the aconite, I start out with the broad statement that it is indicated in all inflammatory and febrile diseases in which there is a frequent small pulse; in the bronchitis of the aged, in the catarrhal affections of infants and children, be it of the stomach, bowels or air passages.

As veratrum is *the* sedative in many cases of full, hard pulse, sthenic disease, so is aconite *the* sedative in the frequent, small pulse, asthenic disease.

The sedative we want in all mucous inflammations, in common catarrh, a bad cold, eyes and nose running, sneezing, constant tickling in the trachea—add one minim specific tincture or fluid extract aconite to one ounce of water; give a teaspoonful every hour; it will surprise any one who has not used it thus. And as before said, and to sum up in a few words, aconite is indicated in all cases of inflammation in mucous tissues; in all fevers with small, quick pulse, if a sedative is desired, aconite is the one.

Trenton, Tenn. S. W. Caldwell, M.D.

A Growing Evil.

Ed. Med. and Surg. Reporter:—

We find in an American journal, apparently published for the advancement of our materia medica, but in reality serving the business interests of a wholesale drug firm, an editorial notice, headed "A Growing Evil," wherein physicians are blamed for not being "fully alive to the importance of *specifying continually* the name of the manufacturer whose remedies they prefer, when ordering from wholesale drug houses or in writing prescriptions."

Our opinion is exactly the opposite one. If there exists anything ridiculous, it is a prescription, as for instance, the following:—

℞.	Elix. cinchon. ferrat. (John Smith & Co.)	f℥ iv.
	Ext. jaborand. fld. (L. Smith & Co.,)	f℥ ss
	Tinct. nucis vomic., (M. Tincture & Co.)	f℥ ij
	Syrup. limonis comp. q.s. ad (F. Syrup & Co.)	f℥ vj. M.
Sig.—		

A physician should know, in the locality in which his patients reside, every apothecary who is reliable, and only to such drug stores should he send his prescriptions to be put up. So-called proprietary medicines should, under no circumstances, be prescribed. The physician should write for such compound medicines only as are either recognized by the Pharmacopœia, or which are of his own composition, and the compounding of which is described in the prescription, while the apothecary is held responsible for the character of the drugs directed to be employed in the making up of the prescription.

Certainly, with sugar-coated pills, for instance, which cannot be made so well in a retail drug store as wholesale, or phosphorus pills, the minute division here necessary being better accomplished by machinery, and with similar preparations, the case is different. The same holds good with certain articles, as Squibb's, ether, etc., where the manufacturer has gained a deserved reputation for the purity and uniform strength of a certain medicine. But what we despise is the employment of any proprietary compounds in the composition of any prescription. Any elixir, mixture, syrup, pills, etc., put up and ready for sale by any drug house, should be discarded. The only use, especially pills of this kind have, is in hospitals and in country practice, where the physician must also dispense his medicine.

Our prescriptions should always be so written that they may be put up by any good apothecary in any civilized country of the whole world. If we write, for instance:—

℞.	Olei morrhuæ,	f℥ iv
	Syrup calci lacto-phosphat.,	f℥ ij
	Gm. acaciæ,	℥ vj
	Misce ut fiat emulsio, ad	f℥ vj.
Sig.—		

any reliable apothecary in the United States, England, France, Germany, Italy or Russia would be able to put up the prescription, while an American traveling in Austria might find

difficulty in procuring his medicine on a prescription as follows:—

℞. Emulsion cod-liver oil and syrup lacto-phosphate of lime (cod-liver and co), f℥ vj.

The physician should be the one who, having judged all the facts bearing upon a case, directs the composition of the medicine indicated, and not the apothecary or wholesale druggist, who compounds a certain mixture, for which the doctor has to hunt up a case in which it might answer its purpose. The medicine must be prepared to suit the case, and not the case made to suit the medicine. **

"Self Abortions."

Ed. Med. and Surg. Reporter:—

I desire to relate the occurrence of several self induced abortions that have come under my notice:—

One case, I remember, was induced by large injections of water, alternating with hot and cold water, used every few hours. After the third day a two months' fœtus was expelled, followed by a profuse hemorrhage, which I was called to treat.

Another lady regularly aborted by introducing a common goose quill and leaving it within the uterus until expelled by uterine contractions. She had been advised to select the end of the third month for the operation, and she laughingly remarked "that she could flip their *eds hoff hevery* time." (She was English.)

I knew another lady who used, for a similar purpose, a common knitting needle, half an inch of the point of which was bent at an obtuse angle.

But the most remarkable case I ever knew came before me last winter. A tall, angular girl, about 20 years old, came into my office, and without hesitating, remarked that "she was in a fix, and was determined to get out or die." Said she had got something in her womb. I asked her what it was. She doggedly replied, "a button hook." I placed her in my chair and found about half an inch of the handle protruding between the labia. She had the point passed beyond the internal os, and in attempting to withdraw it the point imbedded itself firmly in the uterine tissue. There was some hemorrhage, and labor pains were pretty frequent. In her efforts to dislodge the hook she had dragged the uterus low in the pelvis. Seizing the handle with my left hand I introduced uterine forceps along the stem of the hook until they entered the neck of the womb. I then opened the blades so as to embrace the stem at the curve of the hook, and had little trouble in removing it. Labor progressed, and in a few hours was over with, the girl making a good recovery.

Janesville, Wis. H. S. Humphrey, M.D.

—The Japanese Government has lately drafted new regulations for marriages. According to these, no man in the empire will henceforth be permitted to marry before arriving at the age of twenty. Women, however, are to be privileged to marry at eighteen.

News and Mis

British Medical As

The Fiftieth Annual Meeting of ... Medical Association was convened in the Guild hall, Worcester, on August 8th. The President, Dr. Strange, then proceeded to deliver his address, but before doing so, expressed his regret that so few foreigners had been able to attend the meeting. About fifty distinguished men in America and on the Continent had been invited, but only two or three had been able to accept. It was a matter of regret that such men as Charcot, Esmarch, Pasteur and others were not present among them.

PRESIDENT'S ADDRESS.

This occasion being the fiftieth on which the President of the British Medical Association had been called upon to make an address, the usual subjects discussed upon such occasions had been well nigh exhausted, in consequence of which the present incumbent felt much at a loss for a subject upon which to address his colleagues. Taking into consideration that this was the jubilee meeting of the Association, he had decided that the most appropriate topic for his address would be a review of the "Revival and Survival of Medicine," which (dividing the subject into two parts) he proceeded to discuss.

PART I.—THE REVIVAL OF MEDICINE.

The speaker said:—

Turn back with me now, in memory, to the decennium which fell between the years 1830 and 1840. The times were pregnant with mighty changes—political, social and scientific. To those whose memories are able to carry them still further back—viz., to the period immediately succeeding the close of the great Continental wars, the collapse which followed the exhaustion of the nations by those wars must appear a most noteworthy circumstance. This period lasted from 1815 to the financial crash of 1825. The political collapse appears to have been accompanied by a corresponding mental stagnation. Science, which loves to dwell with peace and gentle intercourse, had, indeed, been quietly working in their absence, unnoticed in the political turmoil, and had made frequent efforts to obtain a hearing, but no one listened. The pipers were, indeed, ready, but no one had the heart to dance.

When, at last, the calm of peace settled down upon the nations, the pent-up forces of intellect burst forth; then was developed that new power of combination and association.

Combination, applied to the exercise of thought and to the diffusion of knowledge, resulted in the formation of those great societies of which the "Provincial Medical and Surgical Association" was neither the meanest nor the least valuable. The year preceding the birth of our Society—viz., 1831, had seen the "British Association for the Advancement of Science" launched into existence, our Sir Charles Hastings having been one of the original members. A few years before the Society of German Naturalists and Physicians had been instituted. And, in July, 1832, the foundation-stone of our own

Society was laid in this city, by its distinguished and ever-to be-respected founder, Charles Hastings, and his small, but devoted, band of coadjutors.

As there were great men in Greece before Agamemnon, so also there were great names in medicine before 1832. There were, however, in those days, giants indeed, the like of which, at one period of time, the world has rarely, if ever, seen. Recall to your minds the names of Wilson Philip, who once lived here in Worcester; of Lawrence, of Abernethy, and of Cooper, all of whom, however, were already passing away; and then of Copland, of Latham, of Marshall Hall, of Brodie, and of Watson, in England; of Barclay, and Gregory, the Monroes, and the Thomsons, of Knox, Alison, Bell, and Christison, in Scotland; of Graves, and Stokes, and Colles, and many others, in Ireland. Nor was the Continent in any way behind us. I, myself, had the pleasure and advantage of hearing Louis expound Lænnec, and of literally sitting at the feet of Andral, Chomel, Magendie, Roux, and Milne-Edwards; while Rokitansky, Scoda, Liebig, were raising the German school of medical philosophy from out of its backward, or, at least, little known, condition, toward the pitch of eminence to which it has since attained. And not only was it in medicine proper that this great advance was being made. Biological science generally was reaping, in this generation, the benefits conferred upon it by the one which preceded it. Bichat and Barclay, Prochaska and Wilson Philip, were followed by Magendie and Fletcher, by Milne-Edwards and Marshall Hall, by Charles Bell, Brodie, and Hope, and by a host of others second only in fame to those I have named.

These men all offered for our admiration and imitation two prominent characteristics: patient research and observation of facts, and thorough conscientiousness in the use of them; and unswerving courage and truthfulness in announcing these facts to the world. The days of unquestioned dogma were passing away. No deductions were drawn from a few meagre facts, warped and manipulated to fit them to a preconceived theory; but the true Baconian system was honestly adopted, and no conclusions come to but such as as were justified by the data at command. Compare the diction of Lawrence, of Bell, of Latham, of Watson, of Gregory, Alison, and Christison, of Graves and of Stokes, with that of their contemporaries in any other field of literature, and you will not have to blush for the great physicians and surgeons of that day. Of our own Watson, you know it has been said that he made the "Practice of Physic" to read like a novel; and, in this respect, I think I may call him the Macaulay of medical literature; while the terse and transparent style of Latham and of Bell bears a close resemblance to that of Connop Thirlwall, who, it is said, made but an indifferent bishop, but would have made a first rate Lord Chancellor, or a great physician. I do not like to say anything ill-natured of the style and diction of some of our modern medical authors; but, all the same, I think their time would be not altogether wasted, if, before putting pen to paper, they were carefully to peruse and re-peruse, the works of the older writers to whom I have just referred.

No wonder, then, that in such progressive times, to a mind like that of Hastings, the cold stagnation of a small provincial town was unbearable. He read papers and started journals and societies on a small scale, but it was not until 1832 that he received sufficient encouragement to venture upon that step which he proposed should result in placing the provincial practitioner in almost as good a position as his metropolitan brother. The speaker then gave a description of the provincial physician of that day, which was much like our country physician. The aim of our founder was, that knowledge should be freely and generously communicated by the free and generous intercourse between hitherto separated and scattered individuals. That this aim has fructified so as to justify its conception is, I venture to think, proved by what we see here to-night; by the vast numbers who now call the British Medical Association their professional parent.

In closing the first portion of his address, the speaker said, I fear I have wearied you with these references to an almost forgotten past. But, if it is good for us to look to-day, before and after, upon what we *were* and upon what we *are*, in the hope that we may find a true beacon-light to guide us in the course on which we are now entering, viz., our onward journey in company with the second half of the century of the existence of the British Medical Association, I think the reference will not have been altogether out of place; for, if our fathers did greatly with the limited means at their command, we, with our far vaster opportunities, shall be expected, at least, to equal their deeds. If they laid the foundation of all that is valuable in our modern medical literature; of all that is exact and trustworthy in our scientific precepts: of all that is honest, free, and catholic, in our investigation of truth; of all that is liberal, sympathetic, humane, in our intercourse with each other, and with the world; I think it is due to them that this jubilee—this commemoration of the past and inauguration of the future—should not be allowed to pass away without justice being done to the memory of those whose labors have so greatly contributed to make such a meeting as the present possible.

In this imperfect and necessarily hasty attempt to trace the history of the medical mind during the past half century, I have made no mention of medical politics. Nor do I intend to do so now. A President's address, it is said, as it admits of no discussion, so it should contain no disputable matter. But I may briefly remind you that the great corporations which guard the entrance into our profession, and fix the initial requirements from each candidate, were at length roused from their long apathy, and their exclusiveness was finally broken down by the same active minds of whom I have spoken—those minds who determined that everything connected with medicine should be free. The College of Physicians, before so exclusive, somewhere about 1860 threw open its doors and its honors to all qualified applicants, come from what college or university they might. The College of Surgeons had somewhat earlier given an impetus to enlarged studies by the establishment of its present fellowship

examination; and the sister establishments in Scotland and Ireland soon had to follow suit.

PART II.—THE SURVIVAL OF MEDICINE.

It has been often enough said, but never more to the point than by Dr. Acland, in his address to this Association, at Oxford, in 1868, that "there are certain landing places in a man's life where it is desirable that he should pause and think." Let us pause here, in this landing-place of our existence, this point between the fifty past and the fifty coming years, and look about us, and ask ourselves what manner of a profession ours *now* is? what is the condition and tendency of its mind? what are its aims? and what are the means by which it seeks to accomplish these aims?

Fortunately for our profession, we enjoy absolute liberty in our practice. We have no senate to revise and over-rule the decision of the commonalty of medicine; no courts of appeal, like our friends, the lawyers. We enjoy freedom to think; freedom to speak; freedom to write; freedom to teach!

The great corporations, so long as we do not get convicted of felony, leave us pretty much to our own devices. Neither do they set up any standard of correctness, either of theory or practice. There is no theory which we may not promulgate; no practice, short of manslaughter, which we may not pursue. An unfettered press and open criticism are the courts before which all claims to new discovery, to improved practice, to advance in knowledge, must be brought. All must stand or fall by their own merits. Still, great names have their weight. The words of a Jenner, or a Paget, compared with those of little known authors, are as the discharge of an eighty ton compared with that of a pocket-pistol.

Over the church and over the law, for obvious reasons, it may be desirable that the State should hold a check; but over the investigations of science, and over the application to practice of that science, we will have no master other than the moral conscience of our profession itself.

The advantages of this liberty are obvious. It must be the verdict of the profession itself which shall say, "Well done, thou good and faithful worker, be thou rewarded for thy faithfulness to truth, to nature, to humanity, by the acclamations from the thankful and reverent hearts of thy brethren." This is the true gold. This is the patent of nobility conferred on real merit.

Liberty unrestrained, may, however, degenerate into license. It is this spirit carried to excess which forms one of the nuisances of modern medical literature, when many a fresh investigator will treat his subject as if no one had ever done anything in it before; when many a young observer must narrate what he sees as if it had never been seen before; parading as new what may, perhaps, be found in Hippocrates or Galen; or, at the least, repeating in book and lecture what has been better said a hundred times before. Our current literature swarms with instances of this nuisance, for a nuisance, and a real weariness of the flesh it is to all readers who know the literature of their profession.

Self-assertion! Self laudation! Self-sufficiency! and then the one step further ——! Gentlemen, the quackery, the charlatanry, that exists outside the profession will never hurt us. It is the quackery, the charlatanry, the false pretence, the dishonest self-seeking to be found within the profession, which, if unchecked, will bring disgrace upon us.

A great characteristic of modern medicine is philanthropy; we ignore our own personal advantage whenever it is placed in opposition to the good of our patients. Is not sanitation and the legislation which promotes it the work of our profession, and do we not almost invariably, when entering a house, inquire into its sanitary condition, and when discharging a patient, cured, give him such advice as is calculated to prevent him from again falling into our hands? The public are beginning to feel that ours is not a mere trade, so much attendance for so much money. They are even inclined, some of them, to pat us on the back and call us noble fellows. But be on your guard! Much of this praise is false pretence, and given with the covert intention of trespassing upon your time and labor in an illegitimate manner. I think I have established our claim to two great Christian virtues, viz., true liberty, and charity, or love.

What then remains to complete the Christian triad? Is it not Truth; Truth to nature; truth to ourselves; truth to our brethren and to the world? Are our studies and researches carried on in the sincere desire to attain the truth, and the truth alone? Is our teaching animated by the same principle, and by nothing else? Are our practice and our intercourse with the world regulated by the all-sufficient motto, "Let truth prevail, though the heavens fall?" If we all could answer these questions by a bold and honest "Yes," I should have no fear but that our profession will, in time, arrive at that high pinnacle of usefulness and exalted public appreciation which two great men have foretold for it. It was no less a man than Descartes who foretold that a great future was in store for us. All science, and almost all knowledge, was to be drawn upon to furnish the physician's mind, and then, he said, "all things would be open to him." No less a man than Lord Beaconsfield uttered nearly the same idea. If, therefore, these far-seeing men presaged such things for us if the light of truth were consistently followed, what a failure must it be if truth be lost sight of! If this great light that is in us be turned to darkness, how great indeed must that darkness be!

The spirit of our age tends toward a general *laissez faire;* allowing every one to follow the direction of his own mental bias, or even whim, whether the project be theory or practice. But there must be a right and a wrong road in all intellectual and moral action. Truth being many sided cannot be confined within fanciful bounds. The scientific mind must be perfectly free and open, not enslaved by reverence for a name or by predetermined dogmas.

Nor can there be any real fellowship between honest truth and consciously pursued error; for, independently of contradiction of belief, the lines they severally work upon diverge until they no longer touch at any point. To agree to differ, therefore, is not enough; there must be utter repudiation the one of the other.

And then, in regard to practice, are not the same faults to be discerned? Are there not in our ranks those who conduct their practice under what I may call an organized hypocrisy; men who assure one class of their patients or dupes of the hope of cure when cure is impossible, and given up by all honest men; who assure another class of the existence of serious maladies which no one else can see, and treat them for months or years for ailments which do not exist, or, existing, are of no importance; while guinea after guinea is extracted without mercy, or regard for the means of the patient, or to the real services rendered? By these vile arts the character of a noble profession is dragged in the dust, and fraud, detected in the guise of science, hangs her disgraced head.

Some of these faults owe their existence to the ignorance and caprices of our patients. It would be laughable, were it not lamentable, when the issues of life and death are concerned, to hear the reasons which often guide our patients in seeking what they call "further advice."

One wretched form which this assumption of independence of judgment takes is the resort to advertising quacks, not only those without, but also those within the profession. And then, as regards consultants, do we not recognize a solemn farce when Mr. A. or Mrs. B. returns from consulting, say, some metropolitan celebrity, and tells us that Dr. C. has laid down all the rules for his or her future life, and indicated this or that health-resort as essential to recovery; and all in ten minutes' time and for a fee of one guinea? The issues of life and death, in the case of a stranger never seen before, solved in a ten or fifteen minutes' interview, and all for one guinea? Why, a lawyer would take six weeks to do the same amount of work, and charge a bill of fifty pounds. Such practices on the part of the public must needs tend to relax the morals, and to sap the strict integrity of professional men.

Commenting on the force of example, the speaker said, in these days of liberty of action men are jealous of the control of individual authority. As I have already said, we are a republic; we have no king, either constitutional or despotic. The heads of our colleges are that and nothing else. But, although men will not yield to the dictation of individuals, however eminent or highly placed. will they not submit to the control of their fellows, jointly? Would not the great principle of association be found equal to the *moral* guidance of individual members, as it is to securing their political and professional rights? We know how great is the power of example, which induced the scoffer, who entered the church to sneer, to remain to pray. In the way of moral suasion, the power of numbers is, I believe, even greater than in that of political bias. So, to the voice of the profession, adequately expressed, it is fitting, and, I think, feasible, that every member should ultimately bow.

May I venture to conclude this discourse in words far more eloquent than any I have used, or can use. Words which I wish would sink, this night, deep into the hearts of us all; words of the late wise and good Bishop, to whom I have already referred. "When such a spirit (as that I have endeavored to depict) shall become the prevailing spirit among us, the sick-room will become holy ground—a temple ever ringing with the exhortation *Sursum Corda!* Upward, hearts! Upward above all paltry, sordid, groveling aims and desires. Upward to the level with the dignity of our calling; the privileges and duties of our station; the importance and arduousness of our work. Upward to a fellowship with the wise and good of all nations. Upward to the very Father of Lights; the Fountain of all Goodness! Lift up *your* hearts; and then, from the very depths of thousands of yearning, anxious souls, there will arise the clear response: Yea! we lift them up unto the Lord!"

At the conclusion of this address, Mr. Fowke, the General Secretary, read the annual report of the Council, which shows the Society to be in a most flourishing condition. The receipts for the past year were $82,625, an increase over 1880 of $4480; 715 new members were elected, and there were 76 deaths Concerning the mooted question of homœopathy the Council report that—

"As far as is possible, they have rigidly closed the door of entrance, and have made it impossible for a professing homœopath to enter the Association through election by the Committee of Council; and they have called upon the Branches to aid them, by demanding that every name proposed for election shall be inserted in the circular summoning the meeting at which election is sought.

"They conceive that, by these means, such effectual supervision will be exercised by the Branch Councils that no homœopath will be able to gain admission, either through the Committee of Council or through the Branches; and that thus both doors of entrance are effectually closed.

"Against perversion to homœopathy after admission, they are, at present, powerless, except by the expulsion of the offender; and this, under present circumstances, they consider unadvisable; first, because they hold that such a course would be beneath the dignity of the members of a great liberal profession; and, secondly, because it would confer an amount of notoriety which is very undesirable upon those who were expelled.

"At the same time, the Committee of Council courts a full expression of opinion on the part of the whole Association, as to whether it will tolerate homœopathy in its ranks or not; and, if it should determine that the profession or practice of homœopathy shall—*ipso facto*—disqualify from membership, then they conceive that the course will be clear, since the unwitting election of a homœopath would thereby be rendered null, and perversion after election would imply the voluntary cessation of membership."

After considerable discussion upon subjects only of local interest, the report was adopted and the Society adjourned for the day.

Second Day, August 9th.

After the transaction of routine business Dr. Wade delivered the Address in Medicine. Like the President's, Dr. Wade's address was retrospective in character. He recalled to mind some of the actual facts of medicine as it existed when

this Association was formed, and some others which have occurred since. The sum total of knowledge increases fast, but the capability of individual intellect slowly, if at all. It is not a question of who makes mistakes and who does not, but of who makes the most and who the fewest. Looking at the records of the past, we find that current errors were shared by men who were in the front rank of the profession, and who, did they flourish in these days, would be in the front rank now. No one of the present generation reading for the first time the clinical memorabilia of 1832, can fail to be struck by one all-pervading method of treatment, viz: blood letting. The difficulty is to name diseases in which it was not used, not those in which it was. Its prevalence may be brought very vividly before us by a quotation from a contemporary author. He says: "Blood letting is not only the most powerful and important, but the most generally used, of all our remedies. Scarcely a case of acute, or indeed, of chronic disease, occurs, in which it does not become necessary to consider the propriety of having recourse to the lancet, or to estimate the effects of blood letting already instituted." But, to get a full impression of this frequency, you must read, one after another, the records of cases in which—medical, surgical, traumatical, and obstetrical—bleeding from the arm was practiced. Indeed, this does not exhaust the category. The chief resource of preventive medicine was to let blood from the arm every spring and fall.

Such was the practice of that day, and such, in large measure, the therapeutical science; for, be it observed, these things were done, not only by obscure apothecaries, but under the direction and auspices of those who constituted the highest court of scientific appeal.

Not many years before 1832, a weekly medical journal, which still maintains its high character, was instituted, under the then appropriate name of "*The Lancet*." In a few years after this date the title of this periodical had well nigh become an anachronism.

Within those few years a revolution of opinion had taken place, the like of which the history of medicine wots not of. For, be it remembered, this was not the case of a transient phantasy—of a gourd which, having sprung up in a night, might well wither in a day—but the well established practice of centuries, which had withstood, not only the ravages of time, but repeated volleys from the batteries of wit and satire.

The disuse into which blood letting has fallen is due principally to the fact that our predecessors misused it.

In 1820 a provincial practitioner, a physician at Nottingham, Marshall Hall, opened the first parallel of the siege which, in my opinion, eventuated in the razing of this stronghold.

In 1836, Marshall Hall's last work on blood letting was published. But a very few years elapsed before it had ceased to be practiced. It is curious that the intention of his publication was to regulate, not to abolish venesection. He taught its value, and recommended its employment, but with limitations not hitherto laid down. Men came to look at bleeding from an exactly opposite point of view to that which they had previously occupied; can we then wonder that in a few short years the practice had ceased to exist. Sir Thomas Watson, however, ascribed the decline of venesection to another cause, namely, a change of type in disease; writing in 1867, he says: "What has not been shown is that the human constitution is incapable, from influences to us unknown, of undergoing alterations, in respect to the manner in which it is affected by inflammation and by the reputed remedies of inflammation. For my own part I am firmly persuaded, by my own observation and by the records of medicine, that there are waves of time through which the sthenic and asthenic characters of disease prevail in succession; and that we are at present living amid one of its adynamic phases." To illustrate the fact that many other therapeutic measures (besides venesection) have fallen into disuse on account of abuse, many articles were mentioned and the speaker said:—

It is not so many years ago that there flourished a great clinical teacher, famous alike in the wards of an important metropolitan hospital and by the bedsides of the wealthy. Is it a truism that, to be sound, medicine must be based on physiology? He was an assiduous cultivator and eminent teacher of this science. In the zenith of his fame he sought, as you all know, to establish the plan of treating acute diseases by alcohol in almost unlimited quantity. Is it surprising that his views—earnestly enforced by word of mouth and in fascinating essays, propagated by an enthusiastic and numerous band of disciples, and not without an important substratum of truth—is it surprising, I say, that his precepts became popular, and that his example was for a time largely followed? What is our position now with regard to alcohol and its administration as a drug in acute diseases? Exactly what it was before this mischievous delusion arose. There is no acute disease in which alcohol is necessarily required. On the other hand, there is no acute disease in which special circumstances may not arise which necessitate its use in small, or in large, and even in very large doses.

The medical mind never has ceased, and probably never will, to hanker after specifics.

We see the chemist with his glass vessel full of carbonic acid in one hand, and in the other a lighted taper. He dips the wick in the carbonic acid, and the flame is extinguised. The result is immediate, decisive and unfailing. Can we be reproached for wishing that we might in like manner take a pneumonia in one hand and a vessel full of alcohol in the other, and by a similar immersion procure a similarly decisive and unfailing result. We might, perhaps with equanimity, submit to its being less immediate. Depend upon it, that to those who harbor such a wish, and indulge in contemplating the possibility of its fulfillment, the danger is great of erroneously believing that they have achieved the result. The danger is still greater that they will come to look at many drugs in the light of quasi-specifics, and so relax watchfulness over their effects.

It is true, probably, that no one of us believes in the existence of an absolute specific, which can never fail; but, on the other hand, we must re-

member that the conception of a specific and the conception of failure are reciprocally exclusive. A vivid mental picture of the one necessarily implies a very shadowy perception of the other. One reason why this yearning for specifics is so likely to mislead us is that it almost inevitably involves a conception of disease as a unity, instead of a complexity, of processes.

A "case" of pneumonia is compounded of two parts. The first of these consists of those local changes which are summed up in the phrase "the inflammatory process." It is true, though we do not need to dwell upon it, that even this phrase suggests multiplicity rather than unity. But there are also, as in all cases of inflammation, not only the local focus, but the influences radiating therefrom, and affecting all the organs and constituents of the body. In no disease is this duality better exemplified than in pneumonia, and hence this disease has been so often, in times past, a battlefield for therapeutists. In no disease does this duality require to be more explicitly recognized, because in none is death more often distinctly due to these secondary disturbances, and the danger so little in proportion to the cubical area of the original disease. It is true in all acute diseases, though especially so in this one, that the difference between life and death turns oftentimes on the possibility of rectifying some quite secondary functional disorder, as of the kidneys, the liver, the heart, or (in a single pneumonia) of the other lung. If we cannot unload the camel, we may nevertheless succeed in a timely removal of the last straw. It is true of all acute diseases, that a proportion will, under the most unfavorable circumstances, recover, that another proportion, will, under the most favorable circumstances and the most sagacious treatment, die. But there is a residue in which the issue is in our hands, to make or mar. Which we do, depends, in the main, on the soundness or unsoundness of the abstract principles which underlie our actions. And here let me beseech you in your mind to keep every case in this third category till all danger is gone, or till, on the other hand, death, not in your judgment is impending, but has actually commenced. The desire for a specific is an instinct, and will, therefore, be ever lurking in our minds; and it is because I believe it to be a dangerous conception when translated into practice, that I have dwelt on this question with sincere, if tedious, earnestness.

The connection between debility and disease, as old as true and as true as old, has been advanced by degrees till, in many minds, they appear to have become convertible terms; not, perhaps, avowedly, may be not even consciously, but so effectively as to dominate all other therapeutical conceptions. This position is not tenable. The body enfeebled by insufficient food may yet have its component parts and organs sound and their functions maintaining their due balance and complementary proportion. Practically, taking the case of acute disease, we do not find that the difference in the previous vital status necessarily indicates a decisive difference in the treatment. Take, for instance, two cases of typhus, the one occurring in a person previously in good health, the other in a subject previously reduced by want; it does not follow that in the latter alcohol will be requisite in larger doses than in the former. As a matter of fact we know that the very reverse may happen. It seems to me difficult to get away from the theoretical proposition that the best way to relieve the debility arising from disease is to remove or mitigate the disease. The progress of medical science has, for some time, been most marked in the elucidation of the nature and results of organic disease. The hopelessly irremediable character of the changes here found has certainly tended to enforce the idea of "nourishing, supporting and building up." From this point, the same idea has spread to an earlier stage in such cases, the stage of incipient disease, or to an even earlier stage, that of threatening or impending organic changes—a preorganic stage. Has it not happened that this truly important consideration has been allowed to overshadow other important considerations. If it be important that we should get a complete mental grasp of the whole of a case, it is mainly so that we may be the better able to disintegrate it into its constituent elements; that, having so resolved it, we may the better see what we can and what we cannot cope with. How it might have altered the past, had the custom been universal for each one to ask himself, before deciding on a plan of treatment, these questions: What do I propose to aim at? Why do I do so? How best may I effect my object? Might not such a method also alter the future. Dispassionate survey of present medical practice forces me to the conclusion that, on a very large scale, and in both chronic disorder and organic disease, the physiological basis of treatment is too often unduly subordinate to the restorative basis of treatment. Analyze, each one for yourself and in your own way, the conceptions and the practices of those who have gone before. Above all, analyze your own conceptions and practices. Principles, to be effective, must be bone of our bone, and flesh of our flesh, not foreign bodies, howsoever much embedded or encapsulated. Is the history of medicine from this day to be reversed. Are we in future to be confident that no false prophets will arise; that we shall be safe in believing that all we are told is true. If not, how are we to refuse all the evil and choose all the good. The authority of the teacher, as we have seen, is no infallible test, for the evil may come from an oracle well calculated to command our assent. We must, to a large extent, depend each one upon himself, his own observation and his own private judgment, employing the best means and devices of science to ensure accuracy of observation, and exercising our judgment with caution and modesty. To the few only is it given to extend the landmarks of science or to reclaim the waste lands of ignorance. But to each one is given the power to cultivate and utilize those which have been reclaimed. To each one it is given to make the practice of medicine more rational, more common sense, and, therefore, more truly scientific; to render more rare in the future such dark blots as we have regretfully recognized in the past.

Dr. Cuming (Belfast) said he had great satisfaction in moving the best thanks of the Associa-

tion to Dr. Wade for his very able, thoughtful, and carefully reasoned address. They could have no better introduction to the work of the Sections than listening to the observations of one so competent to make them—observations which embraced a comprehensive view of their present position, and which analyzed so clearly, and appreciated so fully, some of the most important movements and currents of opinion that had been prevalent in medicine for some years past. Every one who, like himself, had been familiar for many years with Dr. Wade's important contributions to medical science, would have expected him to deal with the subject in a careful and interesting way, and to present the results of the ripe experience of a thoughtful physician and an acute observer.

An invitation was read and accepted, to hold the next session of the Association in Liverpool; after which the Association adjourned for the day.

Third Day, August 10th.

After the usual business, the address in Surgery was delivered by Mr. W. Stokes, of Dublin. The speaker commenced by expressing his appreciation of the honor that had been conferred upon Irish surgery in asking him to deliver this address. After referring to the great results achieved by the Association, the speaker said: But, great as have been the results of these efforts of the Association, much yet remains to be achieved. I should like to see loyal and hearty co-operation with the universities, the medical and surgical corporations of the United Kingdom, and the General Medical Council, to raise the standard of Arts education for all joining our profession, by establishing conjointly an examination in Arts which every one, except those with university degrees, should pass previous to commencing the study of medicine. I should, also, like to see a consolidation of the great medical and surgical teaching power that exists in our metropolitan centres, but which, owing to the multiplicity of small schools in them, is, to a great extent, lost to the profession and to the public. Instead of urging the establishment of additional schools, it would be far better to endeavor to bring about such an amalgamation as I have indicated, and coöperate with those who wisely think that among the chief desiderata in our profession is a large amount of training in a university, where the first phases in the life of a medical student can best be spent, viz., first, the preliminary general, and second, the preliminary scientific education. I am strengthened in this conviction by the fact that during the Visitation of Examinations recently conducted for the General Medical Council, in which I had the honor of being associated, the Visitors frequently observed candidates for the diplomas of our corporations whose general and scientific culture was far below what any one joining our profession ought to have.

It has hitherto been customary for my predecessors, at the annual meetings of the Association, either to give a *résumé* of the most recent advances in surgery, and discuss some particular theory or mode of practice on which surgical opinion is more or less unsettled, or dwell on those topics that have proved of special interest to himself. On the present occasion, one which should be marked *meliore lapillo*, to give a detailed retrospect of surgical advancement during the past half century would be a task not alone difficult, but, in truth, impossible in the time at my disposal. I purpose, therefore, to dwell on some few topics of great general interest, involving questions still unsettled, and which more particularly engaged my attention.

What have been these advances? I may mention a few that stand out boldly. The abandonment of an indiscriminate blood letting in almost every form of acute surgical disease, of a reckless use of mercury in the treatment of syphilis, and of setons and moxæ in hopelessly irremediable articular and other diseases; the introduction of the pressure treatment of aneurism by Bellingham, Todd and Hutton; of drainage in the treatment of wounds and abscesses by Chassaignac; of metallic sutures and the perfection of the operations of vesico-vaginal fistula by Marion Sims; of lithotrity by Civiale, Thompson and Bigelow, and of stricture by Syme, Wheelhouse, Maisonneuve, Perréve, and Holt; the *rénaissance* of joint resection by Crampton, Syme, and Ferguson; the introduction and establishment on a firm basis, of ovariotomy, by McDowell, Clay, Spencer Wells and Keith; of bloodless surgery by Esmarch; of skin grafting and sponge grafting, by Reverdin and Hamilton; and of osteotomy in genu valgum, by Ogston; improvements in methods of amputation, by Bell, Teale, Carden, Syme and many others; also the operations of gastrostomy, excision of the pylorus, of the spleen, kidney, supra-pubic excision of the uterus, laparotomy, and cholecystotomy in connection with abdominal surgery. I would also allude to the recently published able essays by Sir William MacCormac and Dr. Marion Sims, the latter paper dealing mainly with antiseptics and drainage in gunshot wounds—these being, in Sir James Paget's opinion, "the most important, perhaps, of all the provisions to be made in healing wounds." Again, we have torsion in the treatment of hemorrhage—a method to which such an impulse has been given by Mr. Bryant; and the treatment of aneurism by arterial ligation, without injury to the deeper structures of the vessels, by the methods of Porter and Barwell. In two cases I adopted Porter's method, using a wire, deligating the femoral artery in one, and in the other the abdominal aorta, Barwell's ligature—made from the aorta of an ox—a method recently tested in the Richmond Hospital by my colleague, Dr. Thomson, who deligated the arteria innominata for subclavian aneurism. Again, we have, in the treatment of fractures, immovable splints, and improved methods of extension by weights, or more perfectly by screw action; of manipulation in the treatment of luxation; and in spinal disease, the use of the plaster jacket of Sayre. The speaker then discussed the question of anæsthetics. In the majority of cases he would unhesitatingly prefer ether to chloroform, and strongly recommends the rule formulated by Mr. Jonathan Hutchinson, in reference to the desirability of using chloroform in cases below six and above sixty years of age. To Simpson is undoubtedly due the credit of discovering, in 1848, the anæsthetic properties of chloroform;

still, we must cordially, willingly and gratefully, endorse the opinion of Professor Gross, that "if America had contributed nothing more to the stock of human happiness than anæsthetics, the world would owe her an everlasting debt of gratitude," for it was in Massachusetts, in 1846, that Morton first demonstrated the possibility of inducing anæsthesia by the inhalation of ether. Antiseptic practice should rank, in my opinion, as the greatest of the surgical advances which the past half century has witnessed. In reference to Mr. Lister's statement as to the value of carbolic spray, at the International Medical Congress, last year, about which there has been so much unfortunate misconstruction, I would certainly say that he did not surrender his position in any way. He merely said that he looked forward to obtaining a more perfect and convenient mode of asepticism than that afforded by carbolic spray. The essentially weak point in the persistent and obstinate opposition to Listerism is the almost universal admission of the truth of the germ theory of putrefaction. If the fantastic theory of heterogenesis had not long since been swept into the deserved limbo of other exploded doctrines, there would be some scientific standpoint for those opposed to Lister's theory and practice. But not having this, and admitting the truth of the germ-theory of putrefaction, they surrender their position.

Those who advocate and practice what they are pleased to term a "modified" antiseptic system, attempt, in fact, in a roundabout, clumsy, inefficient way, to do precisely what those who practice Listerism achieve by means which are the outcome of accurate scientific research.

The aim in both cases is to neutralize or destroy the agencies which predispose to and produce the *materies septica*—in the one instance by numerous uncertain and often inefficient methods; and in the other, by the unerring artillery of chemical agency.

Among many depreciatory remarks that have been made in reference to Listerism, is one based on its alleged want of originality. It has been stated that both antiseptic principles and practice were understood, recognized, and appreciated by many of Mr. Lister's predecessors and contemporaries. Foremost among the latter, M. Maisonneuve has been mentioned. Having attended the *clinique* of that eminent surgeon for two sessions, in 1864-5, I am in a position to mention the nature of the wound-dressings then employed by him. With a large syringe, a quantity of a weak solution of "*acide phenique*" was applied to the wound; then a piece of linen or cloth, perforated with numerous openings and covered with a yellow-colored grease, was placed on the wound, secured by a dry compress and bandage. Such were the antiseptic dressings of which Lister's, it is alleged, are only a somewhat complicated, expensive, and, in many cases, dangerous reproduction. One of the best tests, if not the best, for the value of antiseptic practice is resection of the knee-joint, as there are so many circumstances that militate against immediate union being obtained after it. In the first place, the cases requiring so formidable an operation are, as a rule, in a condition of great physical exhaustion consequent on long confinement, and probably protracted suffering of mind and body. The wound is of necessity a large one; the operation occupies a considerable time; two large freshly cut bone surfaces are made, between which union is to take place; and, lastly, there is the great difficulty of keeping, no matter what appliance be adopted, the limb absolutely at rest during the process of union. Before the adoption of Listerism the surgeon anticipated that four, six, or eight months, or longer, would elapse before union took place, and it was always a subject discussed at consultations on these cases previously to operation, whether the patient would have strength to endure so protracted a suppuration. As an illustration of how changed matters are now, in a series of fourteen of my cases of excision of the knee-joint, the wounds in nine of them united without a trace of pus production; and in the last of them only two dressings were required subsequent to the one applied at the time of the operation, and in seven weeks after the patient was up and going about. Another antiseptic triumph was the case of a boy with extensive necrosis of the fibula, sinuses, and suppuration existing at the time of the operation. I excised, subperiosteally, the diaphysis of the fibula, and the case pursued a perfectly aseptic course, the evidence of new bone formation being also incontrovertible.

In giving the details of these antiseptic triumphs I may be considered dogmatic and egotistical. If so, I regret it, for nothing could be further from my desire; still less would I seem captious or actuated by any partisan spirit. I have mentioned them solely through a desire of having the truth recognized and established, and because personal experience is the soundest basis of honest conviction.

The speaker closed his brilliant defense of Listerism in these words: "In the interests and for the credit of British surgery, it is time so unrighteous a warfare should cease. It is time that the irritating dust of an unreasoning prejudice should be swept away. It is time that one of the greatest discoveries and boons to surgery this century has produced should be universally recognized as such. It is time that its discoverer and exponent should be acknowledged as one of whom it may well be said—

> "With Genius, Nature joins in everlasting covenant still;
> The promises of one, the other fails not to fulfill."

Discussing the question of bone production from periosteum, the speaker said, "As to its value when the membrane is comparatively healthy and the patient young, there can be no question. The activity of bone production and other signally gratifying results of the practice must be acknowledged when performed under these circumstances. These results, however, are not so striking when the patient is an adult."

As regards bone transplantation I cannot speak from any personal experience; but, in connection with this all-important subject, I must allude to the great stride made in this direction by Dr. M'Ewen, of Glasgow. The case of inter-human osseous transplantation, in which over two-thirds of a humerus was restored, and an account of which was communicated to the Royal Society last year, is one which must stand out in

bold relief in the history of this new departure in operative surgery—one which is, with many others, an outcome, indirectly, perhaps, but not the less, a result of antiseptic surgery.

In another group of operations—namely, in amputations—the preservation of periosteum is, according to Von Langenbeck, Trélat, and others, attended with advantage. The formation of a periosteal curtain to cover the cut surface of the bone and its medullary canal is believed to act as a shield or barrier against septic agencies, and diminish the chance of the occurrence of some of the secondary calamities, notably osteomyelitis, following amputations. The method I have in some instances adopted, and with success, is, making a somewhat quadrilateral-shaped flap at the membrane and letting it fall over the cut surface of the bone. Another method, that of M. Trélat, is to detach the membrane all round the bone for fully an inch below the point where the bone had to be divided, making, in fact, a sleeve-shaped flap. This plan must, however, materially protract the operation.

This leads me to consider some other comparatively recent improvements in the operation of amputation, and to bear my testimony to the great advantages to be derived from the adoption of the principle of long anterior flaps, the chief credit for establishing which belongs to the late Mr. Teale, of Leeds; and it is a source of pleasure to me that the advantages from his method of amputation were so soon, and continued to be so fully, recognized and appreciated in Dublin. In reference more particularly to thigh amputation, I cannot refrain from noticing the procedure in which the principle of the long anterior flap is embodied—namely, the "single flap" or "single-skin flap" operation of the late Mr. Carden, of this city.

Gritti's operation, undoubtedly, owes its parentage to that of Carden; but, although the retaining of the patella and consequent preservation of the normal attachments of the extensors of the leg is a plan as good as it was original with Gritti, still the details of this method prevented the realization of those advantages which, in principle, it embodied. Hence the modification which I have ventured to term "supra-condyloid amputation"—an operation which, retaining the advantages of Gritti's method, eliminates its defects by lengthening the anterior flap, forming a posterior flap one-third in length of the anterior one, suturing the patella and femur together; and, lastly, and most important of all, by making a high femoral section, but one not involving the medullary canal.

The special advantages that may be claimed for supra-condyloid amputation are:—

1. That the posterior surface of the anterior flap being covered with a natural synovial membrane, the chances of suppuration and purulent absorption are diminished.

2. Any possibility of the split patella shifting from its place on the cut surface of the femur is prevented by the high femoral section, and by suturing the two bones together.

3. The vessels are divided at right angles to their continuity, and not obliquely, as in other flap operations.

4. The existence of a posterior flap diminishes the chances of any wide gaping of the wound; while the anterior flap, being oval, increases the chances of the stump tapering toward its extremity and assuming the form of a rounded cone.

5. The preservation of the normal attachments of the extensors of the leg.

These advantages embody those of both flap and circular amputation of the thigh, and at the same time eliminate their defects.

In concluding an address so admirable that we regret our inability to give it in full, the speaker said, "I have mentioned many achievements in surgery the past half century has witnessed. Fifty years hence this great Association will, I hope, meet here again, to celebrate its centennary."

Prague as a Medical Centre.

Dr. Roswell Park, of Chicago, writes to the *Medical Bulletin* concerning the superior advantages which Prague offers to Vienna for the *finishing* studies in medicine. There is a maternity hospital in which 3000 confinements take place annually. Gussenbauer (a former pupil of Billroth) he esteems fully as able a surgeon as his former teacher, while Hasner, the oculist, is the most rapid operator living, and Lanfall he considers fully as good an aurist as either Gruber or Politzer. Besides, there are only about one-fifth as many students as in Vienna, which affords better opportunity for study. Since Prague lacks the reputation ot Vienna, the fees for the courses are much less, living is less expensive, and the surroundings are quieter, less distracting and much more conducive to study.

Tri-State Medical Society.

The eighth annual meeting of the Tri-State Medical Society (Illinois, Indiana and Kentucky) will take place in Terre Haute, Indiana, September 26th, 27th and 28th. The President is Dr. J. M. Holloway, of Louisville, Ky; Secretary, Dr. G. W. Burton, of Mitchell, Ind.; Treasurer, Dr. F. W. Beard, Vincennes, Ind. Dr. J. E. Link, of Terre Haute, is Chairman of the Committee of Arrangements, and Dr. Wm. Porter, of St. Louis, Mo., Chairman of Committee on Programme. The programme that we have received indicates that the meeting will be both an interesting and an instructive one, there being no less than fifty-three reports and addresses to be made.

American Academy of Medicine.

At a recent meeting of the Council, the annual meeting of the Academy was postponed until October 26th (Thursday), when it will take place at Philadelphia, at the time of the Bi-centennial Celebration in that city.

Medical Service in the British Army.

From the *British Medical Journal* we learn the following particulars concerning the organization of the medical department of the British force in

Egypt. The force ordered to Egypt consists of about 36,000 men. For this number of soldiers the grand total of those connected with the medical department is 1746 officers and men, 304 vehicles and 940 horses.

Cremation in France.

The Minister of the Interior in Paris recently received the officers of the Society for the Propagation of Cremation, and listened to their arguments. It was his opinion that cremation could only be practiced under the sanction of a special law, and he promised not to oppose the passage of such a law.

Items.

—The National Board of Health of Germany last year spent nearly four million dollars in the prosecution of their labors.

—Prof. Botkin, in Petersburg, celebrated, on April 27th, his jubilee. He had been twenty-five years a successful teacher.

—Dr. I. N. Evans, of Montgomery, who served in the Forty-fifth Congress, is a candidate for the Republican nomination in the Seventh district.

—Sir Edward Burrowes Sinclair, the highly esteemed obstetrican and gynecologist, and a well known writer on subjects connected with his specialty, died lately in Dublin.

—We read from the Vienna papers, that as director of Duchek's Clinic, in Vienna, Professors Erb, Eulenburg and Nothnagel—all three from Germany—will be proposed by the Faculty.

—The latest news in the great field of antisepsis may be considered the fact that the sinews of the Kangaroo are now employed instead of catgut, for ligatures and sutures. They are said to possess none of the disadvantages, but all the benefit, of all other animal sutures, being especially reliable in the ligature of large vessels and in the suture of wounds. (*Deutsche Medicinal Zeitung*, III, 16, 1882.)

—In the beginning of this year blood was withdrawn, for the purpose of a transfusion, from the arm of a fifteen-year old boy, without consent of the parents. The boy himself removed the bandage, and acted otherwise contrary to the directions of the physicians. Mortification set in, followed by death. The parents instituted proceedings against the doctor, but were non-suited, as the boy, not obeying the instructions, became alone responsible for the result. An appeal has been taken to a higher tribunal, and we will communicate the decision in time.

—More than one thousand deaths are reported as having resulted last year, from accidents in mines of the United Kingdom of Great Britain and Ireland. The average of such deaths during the last eight years is one to every 464 persons employed. Fall of rock from the roofs, but more particularly from the sides of the workings, continues to be the most fruitful source of these disasters, and there seems good reason to believe that a large proportion might be prevented by a sufficient provision of timber supports.

—At the last meeting of the Academy of Sciences of Paris, the President, M. Jamin, announced that a committee had been formed some time before to present the eminent chemist and biologist, Pasteur, with a medal commemorative of his great discoveries in those sciences. On the committee were the names of Dumas, Tisserand, Davaine, and many others well known in scientific and social circles. After an able and eloquent *résumé* of Pasteur's special labors, the medal was handed to that distinguished *savant* by his old friend and master, Professor Dumas.

OBITUARY NOTICES.

DR. WILLIAM H. MUSSEY.

Dr. William H. Mussey, of Cincinnati, died in that city July 31st, 1882. Dr. Mussey was one of the most distinguished and public-spirited citizens of Cincinnati. He was born in Hanover, N. H., Sept. 30, 1818; studied medicine in the Ohio Medical College, and was graduated Doctor of Medicine in 1848. He subsequently studied eighteen months in Paris, and upon returning to this country settled in Cincinnati, where he made a specialty of general surgery. He was Vice President of the American Medical Association in 1864, and afterwards Vice President of the Ohio State Medical Association. He also held various eminent positions in hospitals and colleges. He was commissioned Brigade Surgeon October, 1861, and Lieutenant-Colonel and Medical Inspector of the United States Army in June, 1862, and was surgeon-General of Ohio for several years. He was also President of the Natural History Society of Cincinnati.

DR. CARLOS CARVALHO, U. S. A.

Dr. Carlos Carvalho, assistant surgeon U. S. A., died near Boston, July 23d, 1882. He was a son of Emanuel Carvalho, who represented the Chilian Government at Washington for many years. He leaves a widow, formerly Miss Emma Bayliss, of Washington, and two young children.

DR. NATHANIEL FOSTER.

Dr. Nathaniel Foster, an old and eminent physician of Cincinnati, died July 16th, of paralysis. He was a brother-in-law of the late Gen. W. H. Lytle, and was well known throughout the Union.

QUERIES AND REPLIES.

Old Subscriber, Wisconsin.—Bandaging, passive motion of the joint, kneading and friction, with the internal use of iodide of potassium, may do some good, though such enlargements are very obstinate and do not yield readily to treatment.

J. H. S., California. Your description is too vague to enable us to recognize the disorder which you term "moth." If you refer to tinea versicolor, the best treatment would be one of the sulphur preparations, applied locally.

S. T., Nevada.—We never heard of a case where acids produced such an effect.

W. H. J., Ohio.—Croton-chloral is formed by the action of chlorine on allyl. It is an anæsthetic.

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Communications.

DIAGNOSIS AND TREATMENT OF BENIGN TUMORS.

BY GEO. HALSTED BOYLAND, A.M., M.D., ETC.,
Of Baltimore, Maryland.

A tumor, as the word signifies, is any swelling. But from this broad definition practical wants have led to the very many divisions, subdivisions and classifications that crowd our exhaustive works on surgery; indeed, this one subject not only claims more space than any other in them, but whole works are published continually on tumors as a class, or even on any one kind of tumor. Certainly this is perplexing. It is our aim, therefore, in the present article, to place before the general practitioner such condensed information on the subject of benign tumors as may be useful in ordinary practice.

Under the term new growth, foreign growth, in its widest sense, are comprehended all those foreign processes that take place in the human body; either by cell formation, or by precipitates and concretions out of the liquids. The latter possess no texture; these are mostly stones and irregular concretions. On the other hand, we may readily recognize a regular structure and texture in the first named, which, in chemical relation also, claim for them the designation of "organic;" moreover, they offer a long list of common characteristics, which in many respects are entirely independent of the tissue or part in which they appear.

These organic new growths fall, of themselves, into two groups, benign and malignant, principally the former claiming attention in this paper. In spite of the great variety of organic new growths, they all resemble each other in one respect, and that is, that they are composed of the same morphological elements that we find also in the healthy body, and develop themselves on the same plan of construction as normal tissue. In the arrangement and length of development of their elementary principles, the different new growths vary perceptibly as well from normal organs, as from each other. It is upon this and upon the different texture of the pseudoplasma that the distinction above named founds itself, of which more anon.

It is of great importance, theoretically as well as practically, that the morphological elements of new growths can be subject to the same changes as those of the normal organs of the body—namely, the so-called regressive metamorphosis; the fatty, colloid, amyloid degenerations, the mucous softening, the chalky (lime) and bony processes. The chemical composition of new growths shows no marked differences from that of normal tissue.

Albumen, fibrin, cheesy matter, fat, further, substances that give lime and cartilaginous lime on boiling, pigment, also the ordinary salts, cooking salt and phosphate of lime, and finally, water, in greater or less quantity, have been with certainty demonstrated, by chemical analysis, to exist in tumors. In tumors we often find widening and tearing of the blood vessels that run through them, therefore, also, bleeding, inflammation, ulceration and gangrenous disturbance are also found.

Ætiology.—The general ætiology of new

growths is very dark. As local cause, only a certain irritation of the diseased part can be considered. As regards predisposition, it may be noticed that new growths are not unfrequently inherited; sometimes they are on the patient when born; again, they are at other times endemic or epidemic. Predisposing are also early youth and old age, overwork and insufficient food, also other disturbances of the general system, brought about by former diseases. But to return to our two groups—embracing all tumors known—benign and malignant.

From a practical standpoint those tumors are benign which rest upon purely local causes and interfere with certain functions only by pressure upon or pushing aside organs. They can entirely stop the action of an organ, and thus become harmful to the individual, even, perhaps, threatening life, but do not at all exercise any evil influence directly upon the general system. Finally, they remain circumscribed in the locality where they sprung up, and do not return after extirpation. In distinction from these we designate as malignant tumors, those that continually and steadily grow, and finally soften (break down); that successively appear in different places and different organs; that return upon the same or other places after extirpation (recidiration), finally, that develop a marked and general affection (cachexia), and most always bring death to the individual suffering from them.

To the first belong fatty tumors (lipoma), sebaceous tumors (steatoma), fibrous tumors (fibroma), the different skin tumors (cysts, lupiæ) and bone growths (exostoses); vascular tumors (aneurisms, varices, telangiectasis), also polypi, cartilaginous tumors (enchondroma), that first became distinguishable by microscopic research, and were earlier mostly classed under the so-called steatoma, but only on account of their consistency and outward appearance. The representative of malignant tumors, from Hippocrates down to the present day, is cancer (carcinoma), so that malignant and cancerous are still used as synonymous. The fungus medullaris can be only technically a distinct or separate form of cancer; its origin being a hardened mass (scirrhus). Sarcoma is also included, and the tubercle, that formerly belonged to inner medicine only, in the category of malignant neoplasms.

Diagnosis and Treatment of Fibroma.—The diagnosis of fibroma is not without difficulty. Fibrous tumors can be confounded with other hard tumors, or even some soft ones; in many cases it is, for instance, difficult to say with certainty whether the tumor is more of a fibrous or sarcomatous nature. The diagnosis, by a due regard to the tough, stringy or knotty consistency of the tumor and its hardness, must be our main *point d' appui* in excluding other growths, such as enchondroma, osteoma, cavernous tumors, cysts, cancers and sarcoma. Fibrous tumors, like other benign ones, do not possess the tendency of malignant tumors, to soften from the centre out or to soften in different places. As opposed to malignant tumors, fibroids never cause disturbances of the general system, and generally never other disturbances than those of purely mechanical origin and corresponding to the size and locality of the tumor. Swelling of the adjacent lymph glands is absent, except when it is occasioned by inflammation of the tumor. Emaciation and loss of strength are also absent, as a rule, but can develop when the tumor by its position, by ulceration or hemorrhage of its ulcerated surface, produces disturbance of the general system. The only *treatment* of fibroid tumors consists in operative removal. In general, thorough and complete extirpation with the knife is the best; nevertheless, if the seat and relations of the tumor admit it, other means of separation may be advantageous—écrasement linéaire. Chloroform may be given. Prof. Nathan R. Smith used a little chloroform in the extirpation of a fibroid tumor of the breast, in a young colored girl. I had the pleasure and honor to assist him, at his request, in this operation. The patient, a young woman, was about 18 years of age and well nourished, otherwise perfectly healthy, menstruating regularly. The tumor was situated in the left breast, movable and hard. The Professor grasped the tumor at its base and made the incision along the upper surface with a scalpel, and in the long diameter, while I held the edge of the wound and took up the arteries. The operation lasted but a very few minutes; no sutures were used, the edges of the wound being secured by adhesive plaster, and the patient making a good and rapid recovery. The tumor was about the size of a turkey's egg. There was nothing peculiar about the case, but it is a good, typical one, illustrating the ordinary facility with which fibroids may be removed, and a guarantee thus given against return; and it further gives some idea of Prof. Smith's views upon the administration of chloroform during surgical operations. When the girl asked to be thoroughly narcotized, he replied, "I do not want to put you into your last sleep." We gave her, accordingly, a partial narcosis only. In the history of a given case of fibroid we will generally find the growth of the tumor has been slow and without pain.

Diagnosis and Treatment of Lipoma.—Fatty tumors develop themselves almost entirely at an advanced age. The acceptance of the diathesis lipomatosa theory is not warranted by practical observation. The etiology is dark. A blow, push or knock may cause them. They grow slowly and without pain to the patient, whose first inconvenience from them is felt when they attain a large size. To the hand they feel like lumps of normal adipose tissue, that can be pushed aside, and have always a certain tough resistance. The diagnosis of this particular kind of tumor is comparatively easy. Pharmaceutical treatment almost useless. Extirpation is the only radical cure, and this should be done as early as possible. If the tumor has attained the size of a nut or of a hen's egg, or is growing in such a manner as may be seen from day to day, then the operation should be performed at once, as it is very simple, and certain success always follows it at this period, while longer delay invariably brings some dangers. But if the base of the tumor has already considerably passed the size of a hand, then it is better, as a rule, not to operate; because such a lipoma left to itself has never death as a consequence, while an operation that would leave a wound surface of such extent, even undertaken in the most favorable conditions, may endanger life. If the tumor threatens to break through the skin, the operation should be performed, under almost all circumstances; also when the seat of the tumor endangers life. The extirpation of fatty tumors requires great care. At times it is impossible to remove all parts of a lipoma. But even if we remove the most of it we have accomplished much, and it is pretty well established that pieces left behind neither become the germs of larger tumors nor interfere in any way with cicatrization.* In the case cited by Burow,† who extirpated an enormous growth of this class, weighing 27½ pounds, it was impossible to remove the whole tumor. "The healing of the wound took place with incredible rapidity, although large pieces of the still remaining lipoma died in the wound and sloughed off." Considerable hemorrhage may occur, but this is exceptional. If the patient is knife-shy, the écraisement linéaire is in order, but the galvano-caustic wire is much better, and prevents effectually hemorrhage from smaller vessels. Sometimes it is possible, after making an incision in the skin, to isolate and tear out a lipoma with the fingers, by pulling the tumor toward the operator with one hand and pushing back the skin from around it with the other.

Diagnosis and Treatment of Enchondroma.—The cartilaginous tumor forms a round mass with smooth or slightly nodulated surface, that can attain different sizes; sometimes very large size. The commencement may be only as large as a pea, and can take place wherever cartilage exists in the body (Virchow). Not infrequently these tumors, later on, become ossified. They generally cause little trouble beyond pressure, and can exist for from fifteen to twenty years as harmless tumors. The chemical examination of enchondroma has determined that they give chondrin as their main principle. As regards their etiology they often date from earliest childhood, and I. Müller notes especially that the mechanical influences of life and the process of formation of bone during childhood are the first causes of abnormal cartilaginous growth. As far as my own personal experience is concerned I have generally seen them on the fingers and toes. One case of great interest merits a line in this connection. It was that of a young man of about 25 years of age, who had enchondroma of the size of black walnuts on all the fingers and toes of both hands and both feet. Operation was, of course, not thought of, and the patient, who lived in a small German town (Juebingen), came periodically to Baun's clinic, where I was practicing at the time, to be exhibited to physicians and students, more as a surgical curiosity than anything else.* Enchondroma feel hard to the hand, and their diagnosis on the living is not always easy. Even when they are situated on the periphery, and are thoroughly cartilaginous, they have a resistance that resembles that of bone; they feel as hard as stone, ivory-like, as a scirrhus of the breast or a true bony tumor (exostosis). This is exceptional, however. They generally possess a light, glandular, warty surface, of large size, and the nodules on the periphery appear to roll themselves inward, and not to go over directly on to the base of the tumor (soft parts or bones). Exostoses, on the contrary, have a smooth or jagged surface, and spread evenly on all sides in the bone substance. The differential diagnosis is more difficult as regards fibroids, as enchondroma can develop themselves, not only in soft parts, but also on bones, and sometimes *inside* bones, and for this reason can be covered with a bony capsule outwardly, formed by pushing up the bone from within.

* Lebert. *Abhandlung der practischen chirurgie*, p. 119.

† Burow. *Deutsche Klinik*, No. 24.

* In this case the tumors were situated on the last rows of phalanges, at the joints.

The only successful treatment is operative. Even this is not always advisable, unless the tumor, by its position and size, interferes with the function of important parts or threatens danger from expectant breaking out. According to its position, the extirpation may be made by the knife, or with saw and chisel, or we may amputate the part upon which the growth sits. The experience of Dieffenbach in this respect is very valuable, that even after partial extirpation cicatrization can follow. The ossification of pieces of enchondroma left in the wound is regarded as fixed.* If part of the tumor is soft, if it is combined, or is a cystochondroma, we can never count upon anything but a total extirpation. If large arteries run through an enchondroma we may have great difficulty in arresting hemorrhage, in making a partial extirpation, as it is impossible to get hold of the vessel with the pincette, to tie it. As it lies imbedded in the cartilaginous substances, our only recourse is cautery with the iron (actuale); even this does not always suffice. The galvano caustic would be more likely to meet our wants here than almost any other method.

The Diagnosis and Treatment of Exostoses naturally follows, just as enchondroma may become exostoses; and these latter pathologically have the same distinguishing features as enchondroma. We have a soft, porous, spongy exostosis, a hard, ivory-like exostosis, and osteo-cartilaginous exostosis. Exostosis can exist on any bone. It is usually of slow growth, and the soft parts covering such a bone remain healthy. There is no pain during the earlier stages of growth, or even later, unless the exostosis, having attained a very great size, presses severely upon the soft parts, when inflammation may follow, bringing ulceration of the skin, and this in turn succeeded by laying bare the exostosis. Rokitansky and Nélaton attribute the ending in necrosis only to the hard, smooth, ivory-like growth (exostosis eburnea), probably on account of the great dearth of canals for the blood vessels—Haversian canals. Any of the forms of exostosis may become inflammatory, suppurative and carious. They probably rest upon a dyscrasia, or are often hereditary. There may be only one, or many, and on different parts of the body. There is but little more to be said as regards the diagnosis of these immovable, hard, jagged, or smooth, bony tumors—in so far as palpation is concerned; there is less that will aid us in making a diagnosis of exostoses if they cannot be reached by the hand, on account of lying deep and being covered with soft parts; for if undoubted exostoses do not exist on other parts of the body, and thus lead us on the right track, we may as justly attribute the functional trouble to a tumor of another class. In comparison with enchondroma, the surface of an exostosis is smoother, less nodulated, but often sharp, like a cock's comb. The treatment of exostosis is always difficult, sometimes dangerous, often useless. We may only expect results from antiphlogistic and anti-dyscrasic means, when we have to do, not with a true exostosis, but with an osteophyte still in process of formation; that is, with an inflammation of the bone or periosteum. True exostosis can only be removed by surgical operation. If its position is such that the operation would be more dangerous than the further growth of the tumor, it should be left untouched. If the patient desires an operation on account of deformity, or great pain, or interference with the use of parts, it may be performed, provided there is no special danger. Nevertheless, no matter what plan is adopted for the removal of an exostosis, there are all the dangers of a deep-seated suppuration, with affection of the bone to follow; osteo-myelitis, ending in pyæmia, after simple removal of an exostosis, has been frequently observed.

The operation for exostosis consists: 1st, in sawing off, *i. e.*, extirpation of the tumor; 2d, the employment of actual cautery; 3d. resection of the part of the bone on which the exostosis sits; 4th, amputation of the part affected. The ordinary operation, that is, the one that the general practitioner will oftenest have to perform, consists in laying bare, fully and freely, the exostosis by a long incision, the skin being held back by hooks, one on either side, in the hands of an assistant; the tumor is then sawed off with the saw, chain saw, or removed by chisel and hammer, care being taken to hold the chisel well down, parallel to the bone. In vascular, spongy exostoses, with broad base, the best method is the pereum caudens, as it gives us a guarantee against profuse bleeding. Only under these circumstances should actual cautery be employed in the removal of exostoses, as it always causes a partial necrosis, followed by inflammation and suppuration. In order to prevent this, it has been proposed to lay bare the exostosis, carefully scrape off the periosteum, and leave the rest to nature. Necrosis of the upper layer may be, of course, expected after this, but it is extremely doubtful if the whole tumor could be sloughed off in this way. Osteoma of the soft parts must be extirpated like other tumors.

Diagnosis and Treatment of Telangiectasis,

* Lebert. Loc. cit.

Fungus Vasculosis, Nævus.—These are mostly congenital, sometimes caused by a blow, push, or pressure. Mostly on the outer skin; they may, however, appear on mucous membranes; for example, on the lips. Diagnosis generally easy. They may exist on all parts of the body, varying in color from a bright red to a dusky purple and dark brown, in size from a pin's head to that of a black walnut. They have been mistaken for epithelioma, aneurism, lipoma and varices, but these are extreme exceptions, not likely to be met with in general practice; the characteristics of the tumors mentioned being usually so very marked as to make a mistake difficult; besides, they belong to a more advanced period of life. The forehead is often chosen as their seat. Simple angioma is never malignant, even though local recidiration may occur after incomplete extirpation. My plan is to let a nævus alone, unless it grows rapidly. From the long list of therapeutical and operative measures, the following will be found most useful: Compression by bandage, application of cold and astringents (Abernethy). If the tumor is a very vascular one, ligature of the artery leading to it, thus preventing further engorgement of the veins, the primary cause of telangiectasis (and to it these tumors owe their softness when touched by the hand), also are recommended, the introduction of a seton, the hypodermic injection of perchloride of iron (Carter has seen death caused by embolism after this; it is, nevertheless, endorsed by different authorities);* further, the actual cautery, and cautery by medicaments—chloride of zinc. I tried the lapis infernalis in one case—the nævus, a small red speck resembling a broken vein, upon the cheek of a little girl about four years of age, at first increased in size and then began to diminish, and is now disappearing, about the fourth week after the cauterization. They will often do this, however, if left to themselves. Concentrated nitric acid applied on the point of a pine stick, is probably the most effectual caustic. If we have a medium-sized and soft warty tumor (nævus), with pedicle, we may pass a silk thread around and strangulate it—cauterizing the wound surface left with argent nit. (lapis). Sir William Ferguson ran two long needles through the base of a nævus; these were armed with silk thread and were passed through, the one horizontally, the other perpendicularly; the four ends of the threads left projecting after the needles were withdrawn were then tied together and the nævus thus cut off. If the tumor is a fungus hematodes, the following application will act very well:—

℞. Potas. iodid., Aquæ, āā ℥j. M.

This makes an excellent caustic, and will speedily check the advance of the tumor, if applied every day or two as occasion requires, and continued for some time. If the telangiectasis is of a cavernous kind, filled with either blood or lymph, palpation will give us valuable points, especially as regards fluctuation. If opened, the cavern should be swabbed out with a small sponge, wet with a solution of carbolic acid and glycerine, in equal parts, and dressed with adhesive plaster. Great care should be exercised if the diagnosis reveals a cavernous tumor. The galvano-caustic is here, above all, the most sure method, and the one that will give the best results.

Diagnosis and Treatment of Glandular Tumors—Adenoma.—The diagnosis of adenoma is readily arrived at from hyperplasia of a gland, on which it always sits. Almost all that has been said with reference to healing tumors by operation and pharmaceutical means holds good here, only we may obtain better results with medicaments and compression in adenoma, than in other tumors. One remarkable case that came under personal observation, was that of a man in middle life, whose left breast being affected with adenoma, had swelled to the size of that of a girl of sixteen years; the nipple was regularly elongated, the tumor soft to the touch and altogether like a normal female breast. No treatment was given, as the tumor had become stationary and was not objected to by the patient.

Polypi.—Medium hard, bright red or yellowish growths, mostly on mucous membranes, from which they hang by a stem. They are covered with cylinder-epithelium externally; toward the centre they present a mass of thickened mucous membrane, having its origin in a hypertrophy of the minute slime or mucous glands. The cause of their formation is usually to be found in chronic catarrhs, and the nose seems to be their first choice. They are of slow growth, and only cause annoyance by a sense of pressure and fullness in the upper part of the nostril, where their stem allows them to slip up and down, and where they may be easily felt and seen, both from the outside and within. Removal is the only cure. This is quickly, easily and safely accomplished by means of a pair of pincers. The patient, seated in a chair, should be made to expirate, by which the polypus will descend a little, when it is firmly

* Bardeleben-Chirurgie, Vol. I, p. 428.

grasped with the instrument and torn out. The operation is attended with but insignificant loss of blood, and as regards after treatment, nothing is necessary. Very rarely we find one at the top of the pharynx, which if of a more compact structure, will be best removed by galvano-caustic.

Sebaceous tumors, cysts, skin tumors, etc., are such growths as are contained in dermoid, round sacks, closed on all sides, the contents being usually either serum or a composition of fat and lime. The sack itself is a part of the tumor. They may also be formed by the encysting of foreign bodies, such as a gunshot or bullet. They are often due to a tendency to fatty degeneration, but little, however, is known about their general etiology. They feel hard and immovable to the touch, are painless and of slow growth. I will select one case out of my own practice as illustrative: G. G., aged 35, male, well developed and healthy, consulted me three years ago about what he supposed to be a shot left in the lobule of the ear from the discharge of a gun. Upon examination I told him it must be a shot, as it felt exactly like one in point of size and consistency, and as he had a gun discharged at him, other shot having taken effect at the time. Last month he consulted me again, as I had declined previously to interfere. The tumor was softer, but still right hard to the touch, and had grown to the size of a bird's egg. I operated, making the incision behind the lobule of the ear, in order to conceal the scar, and extirpating sack and all. The wound was dressed with adhesive plaster only, and healed rapidly per primam. On opening the sack no shot was found, only sebaceous matter. Operation with the knife is the only radical cure in these cases. A hygroma or ganglion may be punctured, and its contents thus emptied; fluctuation and softness, without inflammation, make them easy to diagnose.

A BIT OF CLINICAL EXPERIENCE AT THE OBSTETRIC BEDSIDE.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Indiana.

The obstetrician often meets with cases in labor that need considerable well-directed tact and discrimination to enable him to do the right thing at the right time, and in the right way, for his patient, and also to acquit himself creditably. Sometimes a case needs a good dose of morphia, sometimes a strong oxytocic.

At the time when the discussion as to the oxytocic powers of quinine and the cinchona salts was active, several years ago, I often tried their virtue in tardy cases of labor. Was called about 3 A.M. to a lady who claimed to be having uterine pains. Her time for confinement was fully up, and she had experienced a few sharp contractions. Examination disclosed a wide, open os, very flaccid. I waited an hour. Only two light pains. Os still the same. The lady stated that I need not be in any haste, as she was always two to three days in labor, and this was not in any way different, so far, from previous experience. I considered the history given, and also recognized a state of almost complete inertia. Gave her at once cinchonidia sulph., grs. x. In twenty minutes there was a severe contraction. This was followed quickly by another and another. In thirty minutes from the time she swallowed the cinchonidia she was fully delivered, and the uterus well contracted down. She had a good recovery. I have often repeated this kind of practice in similar cases, and almost always with prompt benefit.

In 1878 I was called to a lady who had, in her first labor, a very tedious siege. Her pains affected her head, and would come and go in the temporal region with quite perfect regularity. The uterine contractions were feeble and ineffectual. What her attendant gave her I do not know. In this, her second labor, the pain was again in the head, as before. I found her to be a feeble woman, much worn down with her previous sufferings. She was thin, pale, pulse feeble, and greatly depressed, pupils dilated, uterine contractions very feeble, extremities cold, os dilated. She begged me not to give her any morphia, as she would "almost die of the nausea that would follow its use." I gave her, however, morphia sulph., gr. $\frac{1}{3}$, cinchonidia sulph., grs. x, at once, and used a hot mustard foot-bath. In half an hour the head was much relieved. A few minutes later the uterine contractions increased in force and regularity. In one hour more she was delivered. After the uterine contractions became fully normal there was no further complaint about the head. She had a good recovery and no nausea or vomiting from the morphia. A few weeks ago I was called to see a lady in whose case the liquor amnii had been drained off for sixty hours, and there had not been a single uterine contraction of any considerable force. The case had been in the hands of a midwife. Examination disclosed an open, flaccid os, lax uterine walls, and a first vertex presentation. The lady seemed as well as though nothing whatever was unusual about her condition. I gave her cinchonidia sulph., grs. xx, in three doses an hour apart. In a short time feeble uterine

contractions came on. These rapidly increased in force until the delivery was quite rapidly com pleted. I might detail many cases more or less like these, and where cinchonidia or quinine seemed to be of great utility, and to act with great promptness in stimulating uterine contractions.

On the other hand, there are many cases of labor where the pain is very severe, but there is not a corresponding uterine contraction; hence the pains continue to come on for hours without manifesting any expulsive power. Often a full dose of morphia will settle this needless distress, and the contractions will come on normally and labor proceed to a fairly happy conclusion, or the pains will cease altogether and allow the patient a more or less prolonged respite before labor is fully inaugurated. These cases may call forth a separate paper at another time.

In April, 1878, I was called to see a large, healthy lady, in her ninth labor. She was suffering intensely with headache; face flushed, pulse hard and full, pupils contracted, light painful. The uterine pain was light and irregular. I ordered potass. brom., ℈j, every two hours, with also gtts.ij of fl. ext. aconite root, hot mustard foot-bath, and an enema, which cleared the bowels quite freely. Left word to call me at once if there was an increase of head pain, or if labor demanded attention. I feared convulsions, and believed venesection the right practice; but as it was so heavily condemned I desisted for the time. Eight hours later was called. All the suffering in the head greatly intensified and symptoms aggravated. I then tied up the arm, bled her twenty-four ounces before the pulse showed any signs of softening down or the face to lose its turgid flush. She at once lay down and slept two hours, when she was awakened by a sharp labor pain. In one and a half hours she was delivered of a healthy girl. Never had a head pain or untoward symptom after venesection was practiced.

Some years ago I was called to see Miss H. She was expecting confinement, but thought her time not yet out. She was suffering intense headache; face fairly turgid and head throbbing, skin hot, pulse hard and full, urine scant, bowels slightly constipated. Tied up her arm and bled her until the stream ceased of itself; then opened another vein and did likewise, securing in all not over a pint of blood. Gave a full dose of magnes. sulph., which operated freely. She was relieved, went a full month, and was confined by a midwife without an untoward symptom.

Mrs. B., aged 28, third confinement, a woman of strong muscle, a hard worker, full habit, taken in labor at end of her full term. The contractions were very severe, the os rigid, pulse bounding, skin hot, some little headache. The rigid os was the greatest obstacle to free delivery. After four hours of active uterine contraction and the os still unyielding, the arm was tied up, and she was bled until there was a little softening of the pulse, and a little less flushing of the face. Then, almost immediately, dilatation permitted the rapid conclusion of a previously tedious labor.

I well remember an almost fac simile of this case that occurred to me in 1867. The conditions were the same. I had not the courage to bleed the woman. Prejudice was very strong against it, and I was young and timorous. For thirty-six hours the woman continued in active labor (with an unyielding os and perineum), before it was completed. I firmly believe that a free venesection would have set matters right in a little time.

I cannot, by any means, be considered a strenuous and demanding advocate of venesection. But I believe, in properly chosen cases of labor and of threatened eclampsia, and in some cases where eclampsia is already fully developed, it is the very remedy of all others needed. It is to be used as discriminately as we would use any other powerful remedy or means in contest with disease. Never used hap-hazard. Thus brought into requisition it will assume its rightful place in therapy, and be found of great utility.

I reported some of these and similar cases verbally, to a medical society of which I was a member. To my surprise some of the gray heads present thought the treatment was very good, but exceedingly daring for this day and age of anti-depletion. Now, if it was good practice, why call it daring? I had and still condemn myself for not resorting to direct depletion earlier in these cases.

It is certainly to be hoped that, while we should never adopt indiscriminate venesection, as in the past, we may, however, adopt it with that same careful discrimination with which we administer and apply other potent agencies in the treatment of diseases.

—The well known chemical inventor, Jean Wickersheimer, in Berlin, has now invented three fluids, which, while doing no harm whatever to the substances, protect bread, meat and beer against all influences of temperature, weather and atmosphere, for many years.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology.

Reported by Wm. H. Morrison, M.D.

STRICTURE OF THE RECTUM—PROLAPSE OF THE WOMB.

Gentlemen:—I had expected to bring before you, to-day, a case of complete laceration of the perineum. but she has disappointed us. Menstruation has kept away one patient and the bad weather has kept away another, so that we shall have to take what we can find.

The first is a woman whom I have not seen. She is 42 years old and has had several children. Her labors have all been of a natural character.

Five years ago she began to have difficulty in defecation. This has gone on from bad to worse, until she now passes her fæces in ribbons and with great difficulty. Dr. Baer has examined the rectum and found a stricture.

While the woman is being etherized let me say a few words in regard to difficulty in defecation.

I received a letter a week ago, from a physician, in reference to a patient who had previously consulted another physician on account of some difficulty in defecation, which commenced some months ago, but as she gained no relief she consulted the gentleman who wrote to me. He told me that on examining her he found what he thought to be a tumor, but whether it was in the substance of the vagina or an outgrowth of the womb he could not say. This tumor, by its pressure on the rectum, caused the difficulty of which she complained. The way he managed the case was by insinuating a rectal tube above the tumor and injecting the rectum in this way. The woman came to my office this morning. I examined her, and felt a tumor through the posterior wall of the vagina. I think that it is a cyst in Douglas' pouch, which has grown from the under surface of the broad ligament, and being unable to ascend, has developed below, and so pressed upon the rectum as to obliterate its canal. I shall aspirate this tumor after the lecture, and expect to find fluid.

Ribbon-like fæces, with mucous casts of the rectum. sometimes occur in bad cases of retroversion. In retroversion the womb is hypertrophied, and is apt to press upon the rectum, obliterating it to a certain extent. We then get ribbon-like fæces, and in addition, these mucous casts of the bowel. These are very interesting, but have not as yet been thoroughly explained. In these cases, supporting the womb, rest, and a building-up, constitutional treatment will usually overcome the trouble. Arsenic, under such circumstances, is very good.

There is another form of obstruction which I wish you to bear in mind. That is, hysterical obstruction. It is very common. I do not know that a month passes without my having such cases on my hands. I will explain it to you. A woman is hysterical; she is nervous; she has spinal irritation; there is an irregular circulation of the blood and nervous fluid. When I am nervous, I blush or I grow pale, through the influence of emotions on my nerves. The hysterical woman, from the condition of her body, mind and cerebro spinal nervous system, blushes and blanches internally. She blushes in her spine, or some other internal organ, and there is too much blood; or (I am carrying out the simile, and it is a good one) she blanches in these organs. As a result of this action we get spasm of the sphincters. If you push me, and want to know how these changes produce contraction of the sphincters. I admit that I do not know. I only know it as a clinical fact, as I know that calomel will cause purging. The best treatment for this condition is a tonic treatment, with rest, massage and electricity; but in the country you cannot fully carry this treatment out, and have to rely upon tonic and neurotic remedies.

There is still another condition in which you have ribbon-like fæces passed, that is, in fissure of the anus. This woman suffers considerable pain, but not enough to lead us to suspect a fissure, which is a common thing in woman. for, as I have often said, where one man has a fissure, ten women will have one, as a result of constipation. These fissures are very irritable, and excite spasmodic contraction of the sphincter, causing the fæces to be passed in ribbons or in little pellets. By the way, in nervous women, in whom there is no apparent sphincteric contraction, fæces will be passed in the form of pellets.

I shall now examine her. I notice, in the first place, that she has a little prolapse of the posterior wall of the vagina. I observe one thing, which is an evidence of a prolonged labor; she has no cervix uteri. She is only forty-two years old, and the cervix is usually not obliterated until much later. In some severe labor the vagina, which is attached about half an inch above the os, has been stripped all the way down to the mouth of the womb, and in this way the cervix disappears. In such cases it is difficult to support the womb with a pessary, as we cannot get behind the neck of the womb. She has also had a bad tear of the perineum, but this has united.

Passing the sound into the cavity of the womb, I obtain a measurement of only 2.5 inches; trying again, I obtain the same result. This is due to the atrophy of the cervix but it is rare; even in old women, to find this condition.

At the mouth of the meatus we have what looks like a small carunculus, but on closer examination it proves to be a polypus.

I shall now examine the rectum. Before making this examination it is always well to rub soap under the nail. I feel the stricture very distinctly, and the question arises, is it syphilitic? is it a result of natural causes, or is it cancerous? As she has had it for five years, it is not at all probable that it is cancerous.

These cases of stricture are very liable to be complicated with recto-vaginal fistula. You would suppose that when a woman had a stricture, with obstruction and great distention of the bowel above, the fistula would be above the

stricture, but this is not the case. In the majority of cases the recto-vaginal fistula occurs below the stricture. This is due to the fact that a small quantity of fæces finds its way through the constriction into the pouch below, sets up irritation, causes ulceration, and we have an opening into the vagina. These are very troublesome. A short time ago, I received a letter from a lady, and to show you how much patients will sometimes blame their physicians, I will tell you about it. This lady's story was that she had a stricture of the rectum. She had been treated for some time, but a recto-vaginal fistula resulted. The only inconvenience it produced was a whistling sound, resembling that made by a toy balloon. Her family physician, not succeeding in closing it (he applied nitric acid and nitrate of silver), she consulted a noted surgeon (she does not mention his name), who made an incision from the fistula through the perineum, but it did not heal up. I cannot find any fault with this, for I did precisely the same thing myself last spring, but fortunately, in my case, the parts healed up, excepting a very trifling fistula. The lady says that the surgeon put no sutures in, and she adds, "you can imagine my horror when, after getting up, I found that I had one vast opening from the vagina into the bowel." She has no control over her bowels, and a constant bearing-down sensation. She has had three different operations performed, but with only partial benefit. The lady may be mistaken in saying that no sutures were put in, for patients will exaggerate. In my case I did put stitches in, and I think it would be wrong not to do so.

What shall I do with this case? I do not know her history, but as many of these cases depend on syphilitic disease, I shall give her a tonic preparation of mercury, which taken for a few weeks, will do no harm. I shall give her minute doses ($\frac{1}{2\frac{1}{4}}$ of a grain) of the bichloride of mercury, and if I find her blood poor, I shall also give her iron, and perhaps arsenic.

If a woman has had venereal disease, and you are certain that the recto-vaginal fistula depends upon that disease, there is no earthly use in attempting to close the fistula until you have expelled the disease (if that can be done) from the system.

I propose to dilate this stricture. What is the danger in dilatation? First, the force employed may be sufficient, in the diseased state of the bowel, to burst through it into the peritoneal cavity. This is a very serious matter, and in the great majority of cases results in death. That is one reason that I do not like to get hold of these cases. The careful introduction of my index finger may cause a rupture of the bowel. Such cases, as I say, usually die. Why? Because the fecal gas, and sometimes the fæces, pass into the peritoneal cavity, causing peritonitis.

The next danger is hemorrhage, so high up as not to be easily controlled. (While I am talking I shall go on and break up some of this mass.) This is not a pleasant complication. Suppose, gentlemen, that I had a bleeding that I could not readily control. I should then use injections of vinegar. I wish you to remember the hæmostatic qualities of vinegar. It is one of the very best in post-partum hemorrhage, because it can always be obtained. It is also excellent in all operations on this part of the body. For instance, you are scraping a cancer of the cervix; the bleeding obscures vision; you inject vinegar and the bleeding is checked.

I must confess that, from my examination, I cannot tell whether or not this is malignant. It certainly looks cancerous. I am going to leave pieces of this here, and ask some of those gentlemen who are investigating these new growths to examine them and give us their report. There is another thing; there is considerable hemorrhage, more than I like to have under the circumstances. This also leads me to suspect that this is malignant.

Suppose you have tried in vain to check the hemorrhage with vinegar. You then try Monsel's solution and it fails. You must bear in mind that you may have bleeding and death, without the apearance of blood externally. After the injections have failed, take a silver female catheter, or an elastic catheter, and tie around it, below the eye of the instrument, a small petticoat, a circular piece of muslin. That forms an umbrella, so to speak. You then pass the catheter into the bowel until the eye gets beyond the stricture. You then pack between the muslin and the catheter, thus expanding the umbrella. The object of the catheter is to allow the gases to escape. After plugging the rectum a set of nervous symptoms appear, and wind is formed very rapidly. If the woman cannot pass the wind the abdomen becomes very much distended, she becomes very uncomfortable, and you have to remove the plug.

I can now pass my finger with ease through this stricture. I shall now wait a few minutes, to see if there is an internal bleeding. If there is I shall stretch the sphincter, have her carefully watched, and if necessary have the rectum plugged.

At one point I have gotten all the way through the bowel. I want to be sure that I have not gotten into the peritoneal cavity. I examine with my finger, but I cannot pass it beyond a certain point. The sound gives the same result. What I feel may be the posterior layer of the peritoneum. There is still one point at which I want to scrape the rectum. I shall do it very carefully, so as not to get into Douglas' pouch anteriorly. I have never yet gotten into the peritoneal cavity while performing this operation, although I am always afraid of it. It is astonishing how easy it sometimes is to burst through the bowel.

If this is malignant (and the fact that I have been able to break it down so easily, and its whole appearance, would indicate that it is) what I have done will be merely of temporary benefit. Having gotten through the friable surface this bleeds less profusely. It is like cancer of the cervix, when you begin to scrape it you have a great deal of bleeding, but if you push on boldly, going down to the firmer tissues below, the bleeding usually stops. I have now a very good opening.

I shall stretch the sphincter a little, so as not to have any accumulation of blood. Now, there is an advantage of her being in the hospital. If this were a private patient I should certainly inject

some astringent, but being in the hospital, where she can be carefully watched, I shall use no injection.

She will now be taken to the ward. We shall give her enough opium to allay the pain.

Prolapse of the Womb.

This is the patient I had before you last Wednesday, and on whom I performed a preliminary operation. I shall not perform the second operation to-day, but shall send her home to recuperate from this operation.

You will remember that it was this unfortunate woman who had a complete prolapse of the organs of generation. The womb was entirely outside of the body. On examining her to-day, it looks as if the womb was still projecting from the vulva, but it is only the posterior wall of the vagina. We are paying attention to that ulceration which you see there. We are using boracic acid on it. Iodoform would do very well, but it makes such an abominable smell. The formula for the ointment which we are using is as follows:

R.	Pulv. acidi boracici,	ʒij	
	Glycerinæ,	ʒj	
	Vaselinæ,	ʒj.	M.

Ft. ung.

This is a very excellent healing ointment.

The operation I performed last week was upon a tear of the neck of the womb, which was probably the original cause of all the trouble. There was a bilateral laceration of the neck of the womb; this arrested involution; the womb remained larger and contained more blood; having more blood, it was plastic, it could be elongated. There being also a tear of the perineum, the vagina prolapsed, pulling down the bladder and the uterus.

The next operation will be one leading to the support of the womb wholly within the body. I have not decided what operation I shall employ; perhaps the one lately devised by Le Fort.

To-day I intend to remove the stitches. I shall leave two stitches in, to support the parts. The womb has remained up for two reasons: first, it has been, to a slight extent, shortened by the operation, and second, she has been lying on her back for a week.

We shall keep her here until the parts are sufficiently healed, and then send her home to recuperate, for by that time she will have been in the hospital for a considerable period. (The patient was then removed.)

Now, gentlemen, let me tell you the reason why I send her home. I had a very analogous case on which I operated before you three or four weeks ago. I performed at that time the operation for cystocele. I removed an elliptical-shaped piece of the mucous membrane of the anterior wall of the vagina, and brought the edges together. They united perfectly. Two weeks later I restored the perineum, which had been ruptured. That also united perfectly. The very day before I intended to remove the sutures she was suddenly seized with collapse, became cyanotic and had violent dyspnœa. Her condition was explainable only on the supposition of septic poisoning, or of heart clot. The action of the heart was so tumultuous that I could obtain no information from the heart sounds. I then decided the question from the temperature. I said to myself, "if this is septic poisoning, there will be a temperature of 104°, 105° or perhaps 106°." The nurse took her temperature, and found it only 97°. I then took the thermometer and made the observation myself, with the same result. The inference then was that it was a heart clot. Whether the heart clot had been produced by a previous rheumatic condition, whether deposition of fibrin had taken place during two prolonged operations, in which ether was employed, or whether the clots were due to a depressed condition of the blood brought about by a long stay in the hospital, I cannot say; but she died, and I do not wish to put this woman in jeopardy of her life from an operation usually so harmless.

I shall send her home and have her return after the holidays, for the second operation.

Editorial Department.

Periscope.

Chronic Inflammation of the Ovary.

This miserable condition, for the relief of the numerous symptoms and sequelæ of which removal of the ovary has been practiced, has caused this operation to be much discussed pro and con. One of its principal advocates is Mr. Lawson Tait, and he has been much criticised. Therefore, an article by him on the subject, in the *British Medical Journal*, is very opportune. We may have acute or chronic inflammation of the ovary. Acute inflammation is often fatal, and when not fatal it generally leads to a state which makes life long misery. The acute disease may originate in a simple chill, in a hæmatocele, in an attack of gonorrhœa, in some exanthematic fever, or in miscarriage or child bed. The last two sources are by far the most common. Many cases recover and leave no mischief behind, but in others the permanent mischief gives rise to terrible suffering. The symptoms of the acute form are very vague. Oftentimes a woman will say that since she had smallpox, scarlet fever or acute rheumatism, she has never had her periods as she used to have them. For a time more profuse, they became subsequently scanty and painful, the pain increasing as time went on, lasting sometimes for a week or more in every month, rendering her miserable and relieved only by narcotics. We examine the pelvis and find, perhaps, nothing at all. She has received all kinds of guess treatment, and continues to suffer at intervals till the climacteric period is passed. The chronic form offers more definite symptoms. The majority of these cases occur in primipara, therefore, it is noted that the patient has had one

child soon after marriage, and has never been pregnant since. It uniformly unsexes the sufferer, as far as maternity is concerned. They are rarely free from pain, which is intensified during the menstrual week. There is always pain in the left groin, for if only one ovary is affected it is sure to be the left. In many cases a fixed and tender mass, composed of the enlarged and probably adherent ovary, or of the occluded and distended tube, will be felt on one or both sides of the uterus, through the vaginal *cul-de sac*, and the peculiar sickening pain produced by touching the mass will prove its nature. The treatment is the same as that of inflammation of any other organ. But no treatment is of much avail, according to Mr. Tait, other than the extirpation of the organ. He says :—

"Removal of the inflamed uterine appendages may yet turn out to be a failure for some cases; but it never can be so bad as the removal of an eyeball for cancer; and, in the hands of experienced operators, the operations have quite an equal risk. Besides this, the operation for the removal of the uterine appendages is as yet in its infancy; we have very much to learn about it; yet, in spite of this, in my hands, of thirty-five cases performed for chronic inflammation, there has only been one death, or a mortality of 2.85 per cent—a mortality which, I have some reason to believe, is less than that of excision of the eyeball. This one death was due to causes entirely preventable, and ought not to have occurred. The operation is justified by its primary success; and my belief is that my mortality, as my experience grows, will not be more than one or two per cent.

Precisely the same kind of argument applies to its secondary results, which, in the hands of inexperienced operators, are admittedly bad. For my own results, so far, I have abundant cause for satisfaction; some of my cases are yet incompletely relieved, but by far the majority of them are absolutely cured. The first patient from whom I removed an ovary for pain, nine years and a half ago, was completely relieved of symptoms, and she remains so to this day."

Pseudo-hypertrophic Paralysis in Four Brothers.

Dr. Donald Macphail records these instructive cases in the Glasgow *Medical Journal*. In all the disease commenced at about the same age, when the boys were about six years old. The onset was marked in the very beginning by a shuffling walk, an apparent inability to raise the foot well from the floor in walking, with a liability to trip and fall over trifles. From this slight beginning the cases progressed until, in that of the oldest boy, there is almost complete loss of power of the lower extremities. The appetite and general health keeps good. The muscles are very much wasted.

The mother is aged 46, is strong and well developed, and has "never had an hour's sickness." She has a large circle of relations, among whom such a thing as paralysis or fits of any kind has been unknown.

The father is supposed to be about 55. He is suffering from paralysis of the lower limbs. I have not been able to see much of him, but the history and symptoms, so far as I know them, seem to point rather to "descending sclerosis" of the spinal cord. There is marked rigidity of the lower limbs, a certain degree (increasing) of contraction, and very marked shooting pain and severe twitchings, which often awaken him at night. He is unwilling to admit that the disease has been present for more than twelve and a half years, but his wife states that he halted slightly and tripped easily before their marriage, and that he steadily but very slowly became worse. The progress of the disease seems to have been hastened by a hurt received from a fall of stone in the coal-pit where he worked about twelve years ago. His relations have all been healthy.

There have been nine children in the family, six boys and three girls. Four of the boys are accounted for above. Another boy, aged 16, a miner, has been affected a year and a half with symptoms similar, I am told, to those seen in the father, viz., lameness, most marked in the right leg, slowly increasing stiffness, flashing pains, and marked twitching. I have only seen him once, however, and only for a few seconds. The remaining brother died, aged 9 years, of dropsy and "disease of the bowels." Of the three sisters only one is alive, aged 21 years; she has always been strong and healthy. One was drowned, aged 8 years, and the other died at the age of 4 years, of scarlet fever.

The Amyloid Kidney.

The study of all amyloid degenerations is always an interesting one. Here we have to deal invariably with a known cause, producing the degeneration simultaneously in several organs, and we can follow up the process from its beginning throughout all its stages. Dr. E. Wagner has investigated 265 cases, and published the result of his researches in the *Deutsche Arch. f. Klin. Med.*, xxxiii, p. 416.

The causes which in these 265 cases led to the amyloid degeneration of the kidneys were as follow: phthisis 136; diseases of the bone, not syphilitic 56; syphilis 36; diverse rarer diseases (bronchiectasis, chronic ulcerative skin affections, chronic diseases of the mucous membranes, of the same nature, empyema, pyelitis pyelocystitis, parametritis, psoas abscess, cancer, sarcoma) 36; without detectable cause (no dyspepsia, based upon amyloid degeneration? Ref.) 7. Regarding their morbid anatomy, four different varieties may, according to Wagner, be recognized, possessing also some clinical importance.

(*a*) Amyloid kidney without alteration of the epithelium and the stroma.

(*b*) With fatty degeneration of the epithelium, but uninjured stroma.

(*c*) With fatty degeneration of the epithelium and fresh interstitial alterations.

(*d*) Amyloid–atrophic kidney. This form happens mostly in syphilitic persons, and is caused by amyloid degeneration of a previously atrophic kidney.

In twenty cases, in which the urine had been more or less frequently examined, the latter was

as follows: quantity mostly decreased, rarely normal or increased at the beginning of the disease. Spec. grav. generally 1.012–1.020. Color usually light and clear. Percentage of albumen medium. Sediment sparingly or absent; if present, pale. Tube casts often for days absent, broad forms very rare. Only twice amyloid reaction demonstrable on the tube casts. The latter hyaline or fatty degeneration and frequently covered with white corpuscles. Twice casts with myelin drops; once epithelial casts. In one-fourth of the cases red, in half of them white blood-corpuscles. Mostly sparingly granular detritus.

Dropsy was not an extraordinarily frequent symptom, but when present, remarkably obstinate. Several times uræmic vomiting. Ten times hypertrophy of the left ventricle, but, we suppose, then with atrophy of the kidneys.

Hypertrophy of the Heart.

Dr. Bryan Charles Waller contributes to the *Medical Times and Gazette* a lecture on this subject, from which we extract the most salient points, since it will be well for the physician to have them ever before him. Though a pathological change, in that it involves an appreciable deviation from the normal standard, it is not by any means, of necessity, an unfavorable condition. On the contrary it is traceable, etiologically, in the majority of instances, to a secondary attempt at compensation by augmentation of the *vis a tergo* for some primary lesion involving obstruction to the circulation. Such hypertrophies are by no means confined to the heart. Examples of hypertrophy from constant use are to be seen in the blacksmith's arm, and the well developed calves of mountaineers and ballet dancers.

With respect to the ultimate tissue elements, a hypertrophy may be either simple or numerical. In the former, the size of the original elements is increased, their number remaining constant; in the latter, both size and number are alike augmented.

Rindfleisch believes that the muscular fibres undergo multiplication by a kind of splitting process. If we refer to the normal histology of the myocardium we shall see that the muscular fibres divide and branch, forming a sort of network, composed of thicker strands giving off a number of thinner ones. If we suppose that at the point where a muscular fibre divides, it further cleaves downward from the point of bifurcation, we can easily conceive how a numerical multiplication may be thus affected. This view receives some support from the fact that small longitudinal slits and fissures may be occasionally seen extending downward from the bifurcation, as if the fibres were about to split further. Each one of these fibres might grow to the size of the parent and again bifurcate.

This view is rendered probable by the absence of apparent increase in the diameter of the fibres of hypertrophied hearts, which is affirmed by many observers, and corroborated by the results of my own experience.

Concerning concentric hypertrophy, he considers its existence as a pathological condition, very doubtful, and says: I should accordingly advise you provisionally, and in default of further evidence, to include concentric hypertrophy of the heart in the list of post-mortem changes due to tonic contraction at the moment of death, in which position it becomes fixed by cadaveric rigidity. Though rare, and often not a little puzzling, from an etiological point of view, primary or idiopathic hypertrophy does certainly exist. But far more common than the primary hypertrophies are those which are secondary to some antecedent obstruction or hindrance to the circulation of the blood, or the motions of the heart. Let us again suppose a case of aortic stenosis. Before the development of hypertrophy there will be anæmia in front of the stenosed orifice, that is to say, in the aorta and all the arterial portions of the general systemic circulation. But in addition to this, there will also be mechanical engorgement behind the obstructed orifice. Thus, *firstly*, the left ventricle and auricle; *secondly*, the pulmonary veins, capillaries and arteries; *thirdly*, the right ventricle and auricle, and *fourthly*, the venæ cavæ and their branches, will be engorged with blood which cannot make its way fast enough through the partially closed aortic opening. The blood will stagnate in the lungs, and will no longer undergo thorough aeration. But if the left ventricle now hypertrophies, all these grave conditions will become modified for the better. This cavity will then work double tides; the aortic anæmia will be corrected, and the block behind will be relieved; the blood will no longer stagnate in the lungs; the right ventricle will again possess an unembarrassed outflow; and the engorgement of the great veins will subside.

A second class of intra-cardiac obstructions which are relieved and modified by secondary hypertrophy are those caused by dilatation of a heart-cavity. A cavity thus dilated will be obviously burdened with a greater fluid dead-weight. This state of matters will affect the circulation in much the same way as stenosis of a valvular orifice. The dilated cavity will contain more blood, while its propulsive power is, at the same time, diminished; and arterial anæmia in front, with mechanical engorgement behind, will again result. Hypertrophy of the dilated cavity will render it capable of propelling the additional dead-weight of its fluid contents, and thus the circulatory conditions will again approach their normal standard. Many such dilatations are due, in the first place, to regurgitant valvular disease.

I would have you observe that in obstructive valvular lesions, hypertrophy usually occurs directly, and without intermediate dilatation; while in the regurgitant conditions it almost always follows on a previously developed dilatation. This difference is explicable on the ground that the primary dilatation is principally due to forcible entrance of blood during diastole, while the primary hypertrophy is merely caused by the necessity for overcoming the direct obstruction of stenosis.

Very remarkable examples of eccentric hypertrophy of the ventricle are furnished by those cases where aortic stenosis and insufficiency are co-existent. The insufficiency permits diastolic regurgitation, with consequent dilatation, while

the stenosis prevents complete emptying of the ventricle during systole, until a perfect hypertrophic compensation is established. Thus, before compensation is complete, the ventricle is never entirely empty, either during systole or diastole. The resulting enlargement is often enormous. Such a heart is that which I now show you. The aortic orifice is stenosed, and the valves are incompetent. The left ventricle is greatly hypertrophied, and the heart in its recent state weighed one pound eleven ounces.

Statistics of Amputations.

From an elaborate statistical report of the amputations performed in the Glasgow Royal Infirmary during eight years ending December 31st, 1882 (*Lancet*), we extract the following salient points:—

These statistics show a considerable decrease in the rate of mortality after amputations, for the eight years under consideration, as compared with similar statistics for the previous twenty five years. Thus in the first period the number of amputations was 1412 and the deaths 452, giving a mortality of 32 per cent. In the last eight years the amputations were 726 and the deaths 166, equal to 22.8 per cent., showing a decrease of nearly ten per cent.

The number of primary amputations was 307 and the deaths 98 or 32.3 per cent., against 659 in the previous twenty-five years, with a mortality of 36.5 per cent., a decrease of 4.2 per cent.

	Cases	*Deaths*	*Or*	*Against*	
Shoulder joint..	36	13	36.1	39.3	per cent.
Arm.....	68	14	20.5	33.5	"
Forearm.....	28	2	7.1	11.6	"
Hip joint.....	3	2	66.6	85.7	"
Thigh	47	22	46.8	52.5	"
Leg	42	11	26.2	44.9	"
Ankle joint.....	26	6	23.0	27.5	"
Foot, partial...	7	0	...	20.0	"
Elbow joint.....	1	0	...	50.0	"
Knee joint.....	25	13	52.0	40.0	"
Multiple.....	24	16	66.6	57.0	"

The mortality of the four primary major operations, which are usually referred to as the test of success, was as follows: In 185 cases 49 deaths, or 26.4 as against 35.8 per cent.

The number of secondary amputations after injuries was 81 with 27 deaths, or 33.3 as against 51.7 per cent.

The number of amputations for diseases was 338, the deaths 40, or 11.8 against 21.9 per cent. No special cause could be assigned for this decrease in the rate of mortality.

The Segmental Nature of the Spinal Cord.

The *Lancet* says, editorially, that the spinal cord may be regarded as composed of a series of segments, indicated by the pairs of spinal nerves. According to Lüderitz, this view of its structure is morphologically correct. The spinal cord of the ringed snake shows a slight rounded swelling opposite each pair of nerves, which lies above the junction of the respective vertebræ, and consequently corresponds in height to the middle of a segment. The enlargement is due chiefly to that of the gray substance, but partly also to that of the white and to an increased size of the so-called lateral group of cells. The demarcation between the segments cannot be exactly determined, but they are longer in the middle of the cord and shorter toward the extremities, especially toward the basal portion. Similar segmental swellings are to be discerned in the spinal cord of the rabbit, even on naked-eye examination. Careful microscopical measurements of the areas of the several constituents of the cord in transverse section show an analogy between these elemental segments and the swellings of the cervical and lumbar enlargements. The middle part of each segment, for instance, bears a similar relation to the extremities of each segment when the area of the constituent columns is compared. The increase in size at the middle of each segmental swelling is greater in the transverse than in the antero-posterior diameter. The gray substance is enlarged in all directions, but especially in width. The spinal cord of man, however, presents no segmental swellings, and its elements can only be recognized by the intervals between the series of nerve-roots which arise from it. These intervals are larger between the posterior roots than between the anterior, and they are the greater the longer are the segments, being greatest in the middle and lower dorsal regions.

Sclerotinic Acid.

Sclerotinic acid is a substance without taste or odor, feebly acid and hygrometric, but not deliquescent. It has been obtained from ergot by MM. Dragendorff and Sodevissotzky; good ergot containing about four or four and one-half per cent. of the substance. In their experiments on frogs they found that subcutaneous injection of half a grain caused almost complete paralysis, commencing in the hind limbs; there was no reaction on irritation; the cornea was insensible; from time to time a feeble cardiac contraction was noticed. This state persisted for some days; then there was slow amelioration; finally a fresh attack of paralysis, followed by death.

In 1879 Nikitin published a very complete work on the physiological and therapeutical action of sclerotinic acid.

The principal symptoms observed by experimentation on various animals were paralysis, diminution of blood pressure and of the contractile force of the heart in cold-blooded animals.

In acute poisoning he found diminution of temperature up to the time of death, gradual slowing up of respiration, which underwent complete arrest before the arrest of circulation in fatal cases, and finally augmentation of the peristaltic movements of the intestine. From many experiments, Nikitin concluded that sclerotinic acid induced uterine contractions, whether the organ was gravid or not, and rendered the contractions stronger when they already existed.

As regards the therapeutical action of the substance Nikitin recommends the employment of sclerotinic acid, in the dose of three grains, to produce uterine contraction. He has never observed tetanic contraction of the uterus under its use. The mortal dose in the adult is about one hundred and fifty grains.

Among other observers, opinions regarding the therapeutical value of the drug are widely divergent. Hobert, who first administered it, obtained no beneficial results from strong doses in pulmonary hemorrhage or hemophilia.

Ganguillet found that strong doses (fifteen grains) augmented the duration of uterine contraction during labor; this result was obtained about half an hour after the administration of the drug; he gave the acid in an equal quantity of powdered sugar. Rennert injected the acid subcutaneously and obtained results which he considered inferior to those obtained from the use of ergotin. Professor Prevost, of Geneva, has used this substance in metrorrhagia from fibromatous tumors, and considers it as active, if not more so, than ergotine. Stumpf asserts having obtained good results in various forms of hemorrhage, and recommends the employment of strong doses. The observations are, it must be said, as yet, too few to pronounce definitively on the therapeutical value of the drug.

Reviews and Book Notices.

BOOK NOTICES.

Diseases of the Rectum and Anus. By Charles B. Kelsey, M.D. Wm. Wood & Co. (Library of Standard Medical Authors.)

We consider this to be one of the best numbers of this series. It is a carefully prepared monograph, not twenty or thirty years old, but up to the times and fresh from the hands of the author. He has made himself well acquainted with the literature of the subject, and his own experience has been ample enough to enable him to form an independent judgment when authorities conflict. We have read, for instance, with a great deal of satisfaction, what he says about the disputed point of the value of carbolic injections in piles, and think he expresses the case fairly and on good grounds. So we might add of other subjects, that his conclusions usually impress the reader as fair ones and based on sound observation.

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery. By Authors of various Nations. Edited by John Ashhurst, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. William Wood & Co. Vol. II, p. 754.

The contents of this volume are as follows: "Contusions," by Dr. Hunter McGuire; "Wounds," by Mr. Thomas Bryant; "The Antiseptic Methods of Treating Wounds," by Mr. W. Watson Cheyne; "Poisoned Wounds," by Dr. John H. Packard; "Sabre and Bayonet Wounds," by Dr. J. H. Bill; "Gunshot Wounds," by Dr. P. S. Conner; "The Effects of Heat," by Dr. T. G. Morton;" "The Effects of Cold," by Dr. J. A. Grant;" "Abscesses," by Mr. Howard Marsh; "Ulcers," by the late Dr. John T. Hodgen;" "Gangrene and Gangrenous Diseases," by Dr. E. M. Moore; "Gonorrhœa," by Dr. G. W. White; "The Chancroid," by Dr. F. R. Sturgis; "Syphilis," by Dr. A. Van Harlingen; "Venereal Warts, etc.," by Dr. H. R. Wharton; "Surgical Diseases of the Skin," by Dr. James C. White; "Diseases of the Cellular Tissue," by Dr. Joseph W. Howe; "Injuries and Diseases of the Bursæ," by Dr. Charles B. Nancrede.

The names of these writers are sufficient guarantee that the articles are accurate, that they present the art of surgery as it is understood by the most alert students to-day, and that each topic is discussed as fully as the amount of space permits the writer. At the same time, it is inseparable from this plan of getting up a book, that there should be some exhibition of contradictory theories, and some presentation of personal preferences. Thus Mr. Cheyne's article on the antiseptic method of treating wounds must be pronounced an ardent and narrow defence of Prof. Lister and his method, as if they were the only representatives of the aseptic system. Prof. Halford's ammonia treatment of snake bite certainly merits at least a statement of what it is, but Dr. Packard, in his implied condemnation of it, does not even give it that much attention.

A good share of the volume (from page 324 to page 600) is taken up with the articles on the various venereal diseases. These are all deserving of a great deal of praise, as they are compact, clear and practical.

The articles on gunshot, sabre and bayonet wounds have been prepared after careful inspection of the immense mass of new material collected during our civil war, and also after a study of the extensive collections in the National Medical Museum and Library. They are, therefore, peculiarly complete and authoritative, and present results which, as yet, have not become as well known as they should be.

In Dr. Morton's otherwise satisfactory article on "The Effects of Heat," we felt some surprise that he made no reference to sunstroke. It is quite as appropriate, in a surgical discussion of this subject, as lightning stroke, which he does give.

The editor makes some allusion to the "artistic excellence" of the illustrations, but we candidly confess they disappoint us. As a rule they do not "come up" well. Probably this is due to the printing or to the finish of the paper. There are several lithographic plates, which are only fairly well executed.

THE

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THE PREVENTION OF EPIDEMICS.

The outbreak of yellow fever at various points along the Gulf Coast, both in Florida and Texas, is a salutary warning how constantly our country is exposed to this terrible scourge. We have no guarantee but that any summer may witness, in New York, Cincinnati or St. Louis, the terrible scenes which history records in Philadelphia in 1793 and 1819, and in Norfolk and Memphis within the memory of all adults. Sanitation does not arrest the progress of this pestilence, nor is altitude a safeguard against it.

It is a permanent menace, and let it once secure a foothold in the populous and filthy slums of the great cities we have just named, and no one of them will escape under a sacrifice of millions of money and tens of thousands of lives.

What is the preventive measure? In spite of all that has been said, we believe in but one—Quarantine. Of course, modern hygienists of a certain school maintain that quarantine is ineffectual, even harmful. But much of the opposition to quarantine arises from its conflicts with "business interests." These interests will at all times cheerfully sacrifice the life of the masses to the greed of the few. These interests are thoroughly selfish, always ready to falsify health returns, always preferring to involve a State rather than endanger their own petty monetary gains.

This is why we have no great faith in the wisdom of Dr. HAMILTON'S recent announcement that, as Chief of the Marine Hospital Service, he would not declare a port in quarantine except with the consent of the local authorities. Perhaps he has no authority to go beyond this. He probably has not. In that case his position is regretable, as he ought to do that which the limitations of his position prevent him doing.

Local boards are not willing to acknowledge the presence of yellow fever until it is a fact too patent to be denied. Then they usually insist that it is of a mild type, and that segregation is needless.

Medical authorities are not always exceptions to this rule. It would be nowise difficult to name recent instances where the presence of contagious diseases in towns and cities has been concealed or denied by medical officers. They offer plausible reasons, as that the public would be needlessly frightened, that business men would suffer, etc.

Such are the difficulties which an effort at efficient prevention must always meet with. The power to declare quarantine ought to be lodged in a strong central body, a federal office, which would act for the good of the whole country, even if it did require heavy sacrifice of some single localities.

CONGRESS AND THE NATIONAL BOARD OF HEALTH.

We wonder whether the time will ever come when the average human being will give evidence of possession of that seemingly rarest of attributes, "*common sense.*" No one, we take it, who belongs, and ought to remain, outside of a lunatic asylum will think of denying the eminent truthfulness of the old saying that "an ounce of prevention is worth more than a pound of cure,"

yet there are comparatively few men who demonstrate by their acts their professed belief in this axiom. The recent action of Congress in cutting down the appropriation to the National Board of Health to such a ridiculous figure that it will hardly suffice to pay office expenses, is one of those seemingly unaccountable acts of man that can only be explained by the assumption that those who thus legislated lack common sense, howsoever brilliant may be their qualifications as statesmen. We fear not contradiction when we make the statement, that of all bodies in this country, the National Board of Health is by far the most important and the most necessary to the material welfare of our country. We know that health is wealth, and we know, equally well, that wealth is useless or valueless without health. The National Board of Health was created to conserve the national health, by preventing the entrance and spread of disease-producing causes; here, in brief, is the object for which this body exists: It cannot fulfill its mission without money, and by this recent congressional act it has been so crippled as to make it almost practically useless. It is impossible to attribute this lack of interest in matters pertaining to sanitation to other than two causes. Either genuine ignorance of the importance of such preventive measures and the wonderful results they are capable of accomplishing, or to a want of common sense among our law makers. We fear the latter is the cause, since no one can, to-day, plead a genuine ignorance of the value of sanitation when the public press, and the medical profession are constantly presenting its importance to him. It has been stated by the Health Commissioner of one of our most prominent cities that this action on the part of Congress has grown out of the "jealousy of New York, whose health authorities are opposed to anything which will cut down the fees of the Health Inspector there, and New Orleans, whose people object to having a national inspector stationed at their port, lest he might tell the truth about yellow fever and so hurt the business of the city." If this charge be true it only goes to prove that those into whose official care is given the health of their neighbors, also lack this great virtue, since they have defeated the very measures that their positions ought to teach them are so very essential to the carrying out of sanitary reforms. It is a crying outrage for our people to allow their representatives in Congress to appropriate foolishly large sums for *great jobs*, and to refuse to make adequate provision for the preservation of the health of the land. The country doctor is usually an authority in his neighborhood in matters political as well as medical. Let us urge such to take some action in this matter. Explain to your patients the necessity and value of an efficient national board to each and every inhabitant of the land. The intelligent ones will be all the more ready to believe what you say, because they will understand that what you are advocating is in reality opposed to your own pecuniary interests, and that you are therefore actuated purely from a sense of duty, from a regard for the obligations that every man owes his neighbor. At election times seek out the delegates to primary and county conventions, and urge upon them to support only such candidates as are willing to pledge themselves firmly to a liberal support of this Board. It is needless, and would be an insult to your intelligence, to tell you how much good can be accomplished by the well-directed action of health boards; but one fact in this connection is so striking as to be worthy of note. One hundred years ago the annual death rate in England was more than eighty per thousand. Health boards and sanitary associations were unknown. Since then well organized sanitary associations have gradually been brought into existence, with the result that the death rate is now only about eighteen per thousand. The *people* of this country are commencing to take an interest in and realize the value of sanitation, and are ready, if directed how so to do, to compel their representatives to so legislate that they may be protected from the inroads and ravages of disease. This instruction should and must emanate from the medical profession. Their teaching prepares them in an especial manner to appreciate what grand results can be achieved in this direction, and if they fail to so inform their patients they

are neglecting a great and paramount duty that is continually staring them in the face.

THE CAUSE OF DEATH.

We know, almost for certain, how death takes place in all fatal diseases; *i. e.*, we say, that an individual dies, either by the brain, heart or lungs. In reality, however, we are still ignorant how death is brought about, how the machinery comes to a sudden stand-still, what extinguishes, with the last flickering of the final expiration, the vital spark forever. The brain may be extirpated, and animal life has been observed to be still going on; the heart may apparently cease beating, and yet the existence of the being is not finally ended; respiration is to all appearances not filling and emptying the air vessels any more, but still more than vegetation keeps up the complicated machinery, the spark of life still lingers.

What, then, is it that finally causes death? Does it not look very much like the sudden action of a powerful poison, which so thoroughly and at once disintegrates the great circulating, life-giving and life-preserving fluid, the blood, that the nerve centres end their existence, and force the organism to cease every motion, like an engine deprived of its steam?

Experiments that have lately been made, and which we have to thank for the discovery of the *Ptomaines*, may tend to lead us a step further in the solving of the question before us. A. Gautiér has made these ptomaines a special study. It has been demonstrated that many organic substances, the fibrin in the blood, the urine, and certain compounds of tissues, when decomposing, give rise to alkaloids—called ptomaines—which are powerful poisons. This discovery we owe mainly to Selmi. But Gautiér has done more. He thought that if such alkaloids are formed on the decomposition of organic substances, why may not, in the course of the common change of tissues, if the latter is deviating from its true course, also such ptomaines be called into existence.

The result of these investigations fully confirmed his theory. A disciple of G. Pouchet succeeded in obtaining from the normal urine a fixed and easily crystallizable alkaloid, the hydrochloric compounds of which crystallize, as well as those with gold chlorid. and platinum chlorid. And this alkaloid has been found to be exceedingly poisonous; in most minute doses it causes stupor, tetanus and death, within the shortest time imaginable, stopping the heart in systole. This very quality relegates this alkaloid of the urine to the ptomaines, for the toxic effect of which the stoppage of the heart in systole is most characteristic. A mixture of ferrum-chlorid. and ferro-cyanide of potassium colors this alkaloid blue, as it does all ptomaines. Gautiér was able to isolate from the poison of two poisonous snakes (Trigorrocephalus and Naja) two similar alkaloids.

Gautiér proved also the intensely poisonous action of the human saliva on birds. He evaporated twenty grms. of saliva in the water bath, dried the 0.25 grm., weighing residue, and dissolved it in warm water. This solution injected into a small bird, under the skin, caused stupor, dilatation of the pupil, increased frequency of respiration, and in all cases, death. He was able to isolate an alkaloid also out of the human saliva. This alkaloid gave the same color reaction as the other ptomaines.

Another characteristic quality of these ptomaines is, that they form salts with most of the vegetable alkaloids, as morphia, codeia, atropia, veratria, aconitia, hyoscyamia, eserin, and others. The ptomaines are very easily oxidizable, and may be formed during the normal change of tissues, even without the presence of oxygen.

What may all these investigations, and their astonishing results, not explain? If a hypodermic injection of some vegetable alkaloid accidentally is made into a larger vein, and a fatal result the consequence, under all the symptoms which we used to ascribe to the entrance of air, may not the real cause of death be found, perhaps, in the sudden formation of these poisonous animal alkaloids? May not many other similar occurrences, which to-day are clouded in mystery as yet, find a similar interpretation? May not, at the time of the dissolution of the body, a similar

process turn out forever the flame of life? Is it urea, in uræmia, that causes the fatal uræmic symptoms, or does the presence of urea in certain quantities, and under given conditions, produce the formation of these highly poisonous animal alkaloids?

The subject is one of great interest to the medical profession. We mentioned in one of our late numbers, when speaking of the pure keratin prepared from the eggshell-membrane, and its easy transformation into leucin and tyrosin, the "multum e parvo" of nature, and here we have a still more glaring proof, with what few means nature—as with the magic touch of the mystic wand—achieves the greatest results.

THE DARK AND LIGHT AGES.

One cannot read the addresses delivered at the recent meeting of the British Medical Association, without realizing how dark must have been the age of medicine fifty years ago, when viewed from and contrasted with the almost dazzling brilliance of the present age of enlightenment and progress. The past fifty years have been, so far as we know, unprecedented in the medical history of the world, for wonderful progress, undreamed-of achievements and most beneficent developments. It is true that many of the arts of to day are, as Wendell Phillips so beautifully tells us in his famous lecture on the "Lost Arts," but revivals of the realities of bygone ages, and that many accomplishments familiar to our far-back ancestry seem to us but as the mythical impossibilities of a wonderful imagination. Viewed from this standpoint it might seem possible that some ages long past have been equally favored with the comprehensive knowledge that goes to make up the science of medicine that is vouchsafed to us of to-day. But when we remember that we have absolutely no record whatsoever of any such state of knowledge, we are perforce compelled to believe that in our science the present age is by far the best informed and the most progressive in the world's calendar.

Again, it would seem, in the light of the developments of the last half century, that during that period more real progress has been made than in all the many years that had elapsed before. True, isolated discoveries of signal importance have been from time to time made public and proven by experience, but in no other period of medical history have so many and so various additions been made to our knowledge. Every branch of our science has advanced with the most rapid strides. Physiology, histology, pathology, diagnosis, therapeutics, all, indeed, seem as though they had only been heard of fifty years ago, so much do we know now, and so little (comparatively) did our fathers then know. Operations commonly performed to-day would have seemed to them but little short of murder. This progress is but a part of the general march of the world in all scientific pursuits, which has rendered this century a notable one. In this general march any one can have a part, and all should take an active interest. Remember that the life of man has a limit, and that while a large corps of unusually intelligent investigators are now busily employed in unraveling the hidden mysteries of the normal and pathological life of man, the time will come when the dreaded hand of death will summon these men from their earthly labors. If their places are not filled by equally capable men, science will suffer, the dark age will gradually steal back upon us, we will lapse into stagnation, and all that has been gained by the lifelong labors of these grand men will be practically lost, insomuch as it will not be utilized to teach us more. Therefore every one who can (and this means absolutely every one) should constitute himself an investigator. He should cultivate the habit of minute and constant observation, should remember and reason upon that which he observes, and when he has reached some practical result from his meditation, make it known. We must all help to keep rolling this mammoth ball of progress; each must contribute his mite toward the lever that will ultimately succeed in lifting and firmly planting our science on the solid and impregnable foundation of an *exact* science. Remember that many of the greatest discoveries in medicine have been made by country physicians; so let those who imagine

that their country residence debars them from the advantages of experience and observation enjoyed by their urban confrères, disabuse themselves of this erroneous idea, and taking courage from these few words, set to work, each one determined to add his quota to this general, universal medical progress.

PARENTAL GOVERNMENT.

How providential the care is which the Prussian government takes of its subjects, may be guessed from the following: As is well known, in Berlin, as well as in other great cities on the continent, there exists horse-slaughtering houses. The meat is sold to be eaten by persons who may like it, or who buy it because it is cheaper; and it is also mainly made use of to feed dogs. But to prevent any unhealthy meat being sold, and to be able to follow up any possible infection or to detect any infringements, as well as to protect its citizens, the Government has established the following law, of which we make a short extract:—

Sec. 1. The slaughtering of horses or asses, for the purpose of the sale of the flesh of these animals can only be performed in special slaughtering-houses, specially licensed for the same.

Sec. 2. The sale of the flesh of these animals can only be carried on at such places as previously have been indicated to the police authorities.

Every place of this kind must be provided with a large sign, on which may be read, in large and legible letters, the words, "Sale of horse flesh." Other meats cannot be sold at such places, only the flesh of horses and asses.

Sec. 3. No horse and no ass can be slaughtered, till the animal has been re-examined by a veterinary surgeon permitted to make such legal examination.

The animal has to be slaughtered on the day it has been examined. Its flesh cannot be exposed for sale till the veterinary surgeon, after having examined the split head and the lungs of the animal, has entered his permission into the butcher-book.

Sec. 4. Every horse butcher has to keep a butcher-book, which must be approved by the police authorities and be arranged as follows:—

1. Current number.
2. Description of the animal, its sex, age, size, color, weight and special remarks.
3. Day of its purchase.
4. Name of seller and remark on his standing.
5. Veterinary surgeon's certificate of the health of the animal.
6. Day of slaughtering.
7. Permission of the veterinary surgeon, for the sale of the meat.

The rubrics 5, 6, and 7, are filled out by the veterinary surgeon.

Sec. 5. It is forbidden to buy such animals from unknown persons not legally authorized to sell the animal. How the person selling the animal has proven his identity and his standing, has to be remarked under 4.

Sec. 6. Before such flesh can be imported the special police permit must be asked for and obtained.

If horse butchers buy such meat of others in the same trade, the police authority has to enter in the butcher-book the weight, and the number of the other book, and to add the permit given, in writing.

Sec. 7. Infringements are punishable by a fine of $20, or imprisonment for four weeks.

It would be well, for the health of our citizens, if our government would become equally parental in the sale of cattle, etc.

PNEUMONIA AN INFECTIOUS DISEASE.

That acute, lobar, croupous pneumonia is considered by some an infectious fever, with evident tendency to the lungs, or as now better expressed, a zymotic disease, caused by the inhalation of bacilli, which accumulate mostly in a lower lobe of one lung, we have often had occasion to note. The proofs of this statement accumulate daily.

Dr. Köhnhorn found that the disease had become endemic in one of the barracks at Wisel. Occasionally it broke out as a local epidemic. The regiment stationed there had suffered frequently from the disease. Not a year passed without many falling a victim to pneumonia. The regiment was then placed in other quarters, and no further case happened in this regiment. The barracks were torn down, the soil disinfected most thoroughly, as also all the building material. Since the regiment has been camping in these rebuilt barracks not a solitary case of pneumonia has made its appearance.

Notes and Comments.

Phlegmasia Alba Dolens.

To the St. Louis *Courier of Medicine*, Dr. P. V. Schenck contributes a lengthy article on this subject. After reviewing the various opinions that have at different times been advocated concerning its etiology, and leaving the matter in as much doubt as ever, he comes down to treatment, in which we find the following practical suggestion: "There is no doubt that bandages aid the absorption of the effusion, and diminish the size of the limb, and the advisability of this treatment is no longer questioned. The only point is when to use it, and how to apply the pressure, and what material to use. The fresh skin of animals was once used, and it was supposed to possess a certain advantage outside of the mere pressure. Next muslin was tried, then flannels, then chamois skins were applied, then silk in the shape of long elastic stockings; but my experience has been so favorable in the use of Martin's rubber bandages that I think it worth while to call the attention of the profession to their application. The use of these bandages has become almost universal; there is no need of describing their mode of application, every surgeon applies them, the general practitioner employs them, and the obstetrician and gynecologist are now trying them, as a utero-abdominal supporter.

The Radical Cure of Varicocele.

In the *Deutsche Medic. Zeitung*, III, 16, '82, we find a description of a method of operation which has proven very successful for the cure of varicocele in the hands of Dr. Reg. Harrison, of Liverpool. The operation recommends itself by the fact that recurrences after this method have not been observed.

The procedure is as follows: After the cord has been laid bare by a vertical incision of about one inch in length, those varicose veins which appear especially prominent are, each by itself, ligated with a catgut ligature (usually 3 to 4). The smaller veins, which generally are met with in different numbers and in form of plexus or bundles, especially in the neighborhood of the epididymis, are destroyed with a few light touches of the thermo-cautery, while the vas deferens is held between thumb and forefinger of the left hand and carefully protected against any injury. This permanent destruction of the small veins is essential, as in this way alone any recurrence can be prevented. During and after the operation perfect antiseptic treatment, and no suture. The cicatrix formed by granulation looks well and is contractile.

The very old method of removing a piece of the scrotum, as practiced by Dr. Henry in New York, and Dr. Levis in Philadelphia, is not thought well of by Dr. Harrison.

Ligature of the Innominate Artery.

Mr. Thompson's patient, an account of whom has already been given (see Reporter, August 5th, 1882), died July 20th, the forty-second day after ligature of the innominate artery. There was no recurrence of bleeding after the thirty-ninth day. The sinus was found to terminate in an ulcer, which involved the anterior wall of the junction of the innominate, carotid, and subclavian arteries. The innominate and carotid were filled with clot; the subclavian contained a clot occluding it to the extent of half an inch. The position of the ulcer was on the distal side of the ligature, the constricted portion of the innominate not being involved. The hemorrhage had apparently taken place from the innominate, as there was a recent blood-stain on the cardiac side of the clot. None of the vessels were pervious to water forced in with a syringe. The aorta was atheromatous. Consolidation was proceeding satisfactorily in the tumor. Excluding the successful case of Dr. Smith, of New Orleans, this is the second longest survival on record; Graefe's case having reached the sixty-seventh day, and Cooper's the thirty-fourth.

Isolation in Contagious Diseases.

At a recent meeting of the Académie de Médecine, M. Hillairet read a report prepared in answer to a question asked by the Minister of Public Instruction, regarding the length of time a pupil affected with any of the contagious diseases should remain separated from the other pupils. M. Hillairet's report may be summed up in the following propositions: 1st. Pupils suffering from varicella, smallpox, measles, mumps or diphtheria should be completely isolated and hold absolutely no communication with the other members of the school. 2d. Isolation should continue forty days for smallpox, measles, scarlatina and diphtheria; twenty-five days for varicella and mumps; the patient should have repeated baths before being allowed to join his comrades. 3d. The clothes worn by the patient at the time he fell sick should be submitted to a heat of 90° C., and then to repeated fumigations

of sulphur. 4th. The bed-clothes, curtains, carpets, furniture, and even the walls of the room occupied, should be carefully disinfected, washed and aired. 5th. If the pupil is taken sick at home he should not be allowed to return to school without the certificate of a physician attesting that all these precautions have been faithfully carried out.

Ether.

In the *Lancet*, Dr. H. Bendelack Hewetson discusses the relative value of ether when prepared with "rectified" or "methylated" spirits of wine. The author states that there is a great difference between them. That prepared with rectified spirits has been found by those who have used it less safe and less desirable, producing more sickness and laryngeal spasm in certain cases in which there is a tendency to such complications. Of the use and applicability of the methylated ether—as the safest anæsthetic known, when carefully administered by means of Clover's inhaler—he can speak strongly, as the result of daily observation. It is a very ordinary circumstance to occupy eighty seconds in producing complete anæsthesia, without a struggle or a cough, and it is by no means extraordinary for a patient to be "fully under" *within* the minute. In the case of short operations upon the eyes, and the like, it is hardly ever necessary to reapply the inhaler after it has been once removed for the operator to commence, the patient remaining sufficiently anæsthetic for an operation such as mentioned to be completed without hurry. Anæsthesia can be prolonged with equal safety even so far as to keep a patient in labor completely under its influence for upward of *four hours*, the longest time which has happened in my experience. Methylated ether is, I consider, from this point of view, the safest and cheapest anæsthetic at present in use.

Retroflexions of the Uterus and Painful Menstruation.

At a recent meeting of the Obstetrical Society of Dublin (*British Med. Jour.*), Dr. Hermann read a paper on the above subject. He discussed at some length the influence of retroflexion in producing difficult menstruation, and offered the following conclusions:—

That while dysmenorrhœa accompanying retroflexion is often, it may be generally, dependent upon other concomitant conditions, yet there are cases in which it is simply the result of the displacement; and that in such the dysmenorrhœa is probably entirely due, not to the flexion, but to the veins of the broad ligaments being compressed against the utero-sacral ligaments.

He said it was impossible to avoid reasoning from pain; and he thought that, by taking a large number of cases, errors due to the incorrect statements of a few individual patients became neutralized. He did not think that the cases in which the utero-sacral ligaments caused congestion of the uterus were more than a small minority.

Permanganate of Potash, in Gonorrhœa.

Prof. Zeissl, of Vienna, recalling the accidents which may result through the employment of caustic injections in the treatment of gonorrhœa, stated that he had observed in the Vienna Hospital a number of cases of stricture, which he considered due to the employment of too concentrated a solution of permanganate of potash. This method is, it may be said, at the present time, à la mode with the physicians of Vienna.

The good effects obtained from it in the treatment of gonorrhœa cannot be denied, but Prof. Zeissl affirms that the employment of a weak solution is without caustic effect, and yet possesses sufficient astringency to obtain the desired effect. This he has proven in many cases with the following solution:—

℞. Potass. permanganat., gr. $\frac{1}{8}$
Aquæ, ℥ ij. M.

The Elastic Ligature for Opening Sinuses.

In the *Medical Times and Gazette*, Dr. Henry A. Lediard recommends the use of a fine rubber ligature in opening up sinuses about the posterior part of the mouth. He relates the case of a patient with several sinuses in and about the soft palate on the right side, and in the neighborhood of the tonsil, resulting from repeated abscesses of long duration. A scanty purulent discharge was always present, causing a disagreeable taste in the mouth in the morning. A considerable amount of cicatricial tissue was present near the right tonsil and about the soft palate. A probe searching behind the velum found its way into a sinus, and the point of it projected the tissue above the last molar tooth. He cut down upon the probe-point with a view to establish complete drainage through the incision, which, although very small, caused a lingering hemorrhage, which was not checked without trouble. In order to find the course of the pus, which still appeared, he passed some fine elastic, tied to a thread upon

an aneurism needle, through the track above mentioned, and tied it; in forty eight hours the tissues were cut through, and a sinus laid open. No hemorrhage and only bearable pain resulted. The effect was beneficial, but other sinuses appeared still, behind, in parts considerably altered by the old inflammatory action. He accordingly repeated the process, passing the ligature partly through a blind sinus, and bringing it out through healthy parts; and this was done altogether three times, with the result of complete cure.

Perforation of a Gastric Ulcer into the Left Ventricle of the Heart.

This peculiar condition was detected in the case of a laboring woman, aged 55, who died with the symptoms of a perforating ulcer of the stomach. During life the remarkably irregular action of the heart had been noted, but found its explanation only after death, in the lesion of the muscle of the heart. There existed, besides, a left-sided pleuritis, caused by the ulcer. This pleuritis had produced adhesion of the diaphragmatic pleura to the pericardium. In consequence of this the base of the ulcer had been brought in direct contact with the pericardium, and so caused a perforating ulcer of the left ventricle of the heart. The seat of the ulcer in the stomach was distant five ctm. from the cardia, and situated in the lesser curvature.

Accidental Removal of Uterus—Recovery.

At a recent meeting of the Obstetrical Society of London (*Amer. Jour. of Obstet.*) Mr. Hopkins Walters exhibited a uterus with one ovary and Fallopian tube, and a piece of omentum that had been torn away by a midwife in the attempt to remove an adherent placenta. The patient made an excellent recovery.

Hemorrhagic Polypus.

At a recent meeting of the Obstetrical Society of Dublin, Dr. Henry showed a tumor (*British Med. Jour.*) which had been expelled from the uterus of a woman on the previous day. In March last she menstruated normally, but her period did not appear in April. In May, at the menstrual period, she felt something moist come away, and then a gush of blood followed. In June she expelled a three months' fœtus, and on June 30th the mass now shown came away, it having been previously felt in the uterus. The tumor consisted apparently of blood-clot, to which remained attached the membranes, placenta, and cord of the fœtus, expelled eight days before. It was thought the case was one of what had been called "hemorrhagic polypus."

Meniere's Disease.

The following case from the *British Medical Journal* well illustrates the necessity of caution on the part of the public in forming opinions on matters relating to medicine: On the 21st of last October a court of inquiry was held to inquire into a charge of drunkenness preferred against a sub-constable. He had been seen to stagger and reel while on duty. He was taken to the barracks, where, in a short time, the transient attack of giddiness having passed away, he seemed, as he really was, perfectly sober. He was seen two hours afterwards by Dr. John Ringwood, when he exhibited well marked symptoms of Menière's disease; noise and hissing in his left ear, numbness behind the ears and down the left arm, depression, occasional vomiting, giddiness, objects going to the left side, the drum of the ear inflamed, and the left Eustachian tube plugged. Improvement followed inflation with the Eustachian catheter.

Butternut as a Preventive Remedy in Abortion.

Dr. Bell Morrelton reports (*France Médicale*) several cases in which the extract of butternut (juglans cinerea) seemed really efficacious in preventing abortion.

He employs the following mixture:—

℞. Ext. hyoscyam.,	ʒj	
Ext. juglans cinerea,	ʒj	
Ol. sassafras,	℥ss	
Sodæ bicarb.,	ʒss	
Syr. simplicis,	℥vj.	M.

A teaspoonful of this mixture may be administered three times daily during the entire period of pregnancy, after the threatened abortion.

The same physician has also employed this remedy in scrofulous affections and as an injection in leucorrhœa.

Deaths of Children from Syphilis.

The *British Medical Journal* notes that during the past eight years as many as seventy eight children have died in Sunderland, from syphilis. This is according to statistics, but it points out the fact that this can hardly represent the true mortality, since medical men, in giving certificates of death, could not, in many cases, state syphilis as a cause, lest by so doing they would cause much domestic misery.

Œsophagotomy.

The *Lancet* notes that the œsophagus has been recently opened in London, by Dr. Stephen Mackenzie, for cancer, in the case of a man sixty years of age. The walls of the œsophagus were so cancerous that it was difficult to recognize it, and they were so friable that the attempt to secure it to the skin was abandoned and a large elastic catheter was introduced and tied in. This operation is of value in so far as it tends to dispel the hitherto generally accepted belief as to the danger and difficulty of the operation when undertaken for stricture. A full report of the case will be given when all the details are complete.

Cause of Red Sweat.

That blue sweat was due to micro-organisms, and that the latter are found even in yellow sweat, has long been known. Babesin reports to the *Ctrlb. f. d. Med. Wiss.*, that he has been able to detect bacteriæ in red sweat, and especially in the hairs of the armpit of such a case. He considers these bacteriæ to belong to the same class as all chromogenic bacteriæ, being very much like the bacterium prodigiosum. They are easily destroyed by disinfecting solutions of proper strength.

Treatment of Styes.

As a means of "backing" a stye, Dr. J. P. McGee, of Tennessee, states that the practitioner can use to advantage the following treatment:—

℞. Fl. ext. belladonnæ, gtt. iij
Aquæ pluv., ℥ ij. M.
Sig.—A teaspoonful every hour.

At the same time he may give calcium sulphide, $\frac{1}{8}$ or $\frac{1}{10}$ gr. every hour, for five or six doses, then every three; although the belladonna is often sufficient alone. Remember, this is sufficient only in the very early stage of the affection—within the first six or twelve hours. He will find it "back" at least three of the five.

Suture of Tendon.

Dr. Yeats recently presented a case to the Manchester Medical Society (*British Medical Journal*) where he had, six weeks after an accident, united with four catgut sutures the divided ends of the tendon of the extensor communis digitorum of the middle finger, at the metacarpophalangeal joint. The skin wound was united by silver sutures. The operation was done antiseptically. The wound healed in four days; and three weeks afterward the patient had perfect control over his fingers, flexion and extension being perfect. At the end of five months the fingers were as strong and useful as before the operation.

Pasteur's Inoculation Questioned.

The *Medical Times and Gazette*, quoting from the *Revue Med.*, says: M. Duclaux, Professor at the Agronomic Institute, and charged with the delivery of a course on Chemical Biology, at the Sorbonne, has devoted a chapter of his work, "Ferments et Maladies," to the consideration of M. Pasteur's inoculations. We know that M. Pasteur takes a virus, cultivates it under determinate conditions which are still kept secret, and professes to transform it into a "vaccine" virus, which, when inoculated, preserves an animal from a disease caused by this same virus when not attenuated. We are of opinion that he does nothing else than the practitioners of former times did when they inoculated smallpox, and which those of our contemporaries have so unfortunately done in inoculating syphilis, with the object of preserving from diseases that can only be taken once. Three circumstances may occur—1. The animal inoculated is not favorably disposed for the infection, the virus does not take, and there is no result; 2. The virus takes and a slight form of the disease is produced, which preserves from an ulterior attack; 3. The virus communicates a dangerous form of the disease, and the animal dies. This last case occurs pretty often after the vaccination by the Pasteurian procedure, and perhaps not a week passes in which carcases are not received at Alfort that have had no other cause of death. There is no analogy whatever between the Jennerian vaccine virus employed for prevention against the smallpox and the *virus-vaccin* used by M. Pasteur. Never has vaccination given rise to the production of variola; and variola and vaccinia have been observed in a state of simultaneous evolution in the same individual. Never has vaccination caused death, except when the virus has been mixed with virulent pus; while this *virus-vaccin* has already killed a number of animals. What number? This should be stated in a matter of such importance.

Such accusations should have strong authority to substantiate them, else they had better be left unmade.

—Professor Kundral has been appointed successor of the celebrated Heschl at the University in Vienna.

Correspondence.

Veratrum Viride in Puerperal Convulsions.

Ed. Med. and Surg. Reporter:—

On Friday, April 30, 1880, I was called to see a colored woman, aged about 19 years. Found her in convulsions, which were quieted in a few moments by the inhalation of ether, and by 5 minims of tinct. verat. viride (Norwood's), subcutaneously. After she became quiet the husband informed me that she had been suffering with great pain for several hours, which gradually became worse; about one and a half hours before I saw her she had her first spasm; her fifth was the first I saw the patient in. It was the most severe.

This patient was well advanced in labor. I found the os dilated well; head in the first natural position (acccording to Miller, left occipito acetabular). Labor progressed very slowly, uterine contractions being feeble, and after waiting half an hour found the womb still inert. I decided to excite the action of that organ. I injected, hypodermically, 10 minims of ergotine and 5 minims of tinct. verat. viride combined. I used the latter for fear of a return of the spasm, which did occur as soon as the uterus became active. During this spasm the membranes ruptured spontaneously, a ten-pound male child was born, and twenty minutes after placenta, etc., were taken away.

I waited the usual "hour;" finding no recurrence of convulsions, nor any flooding, I left her doing well. What the convulsions were due to, I think, was her condition; she having suffered several months from malarial fevers, which had nearly exhausted her strength, she became anæmic.

When I first saw her she was suffering great pain from œdema of the lower extremities. Her face was swollen to almost disfiguration. Strange to say, the patient's urine showed but a small quantity of albumen on the proper test for same.

By means of the "tonic and suppurative treatment" my patient made a good but slow recovery. The reason I report this case is, that I have had the opportunity of treating some cases before, and have had several since this one, with equal success (except one), with verat. viride.

I intend to use this remedy whenever a case presents itself, and hope those of the *regular* profession who have not tried it, under the circumstances above mentioned, will give it a fair test.

Do not wait to give the remedy by the mouth, but give it hypodermically.

Natchitoches, La. W. B. Powell, M.D.

News and Miscellany.

British Medical Association—Meetings of Sections.

SECTION OF MEDICINE.

The address in the Section of Medicine was delivered by Dr. T. Clifford Allbutt, who chose the subject, "*Modern Freedom of Thought and its Influence on the Progress of Medicine.*" He said, what is that spirit, which, in this century, has expanded and transfigured our art? It is not the new power of unity alone, that strange, new function which is bred in gatherings of men, a thing higher and other than the mere addition of individual faculties; this union the press and the railways have made possible; but there is that something more, some masterful expansion which has widened the life and nerved the arm of modern science. This comes, gentlemen, of the gift, without which all other gifts are but as apples of the Dead Sea, the gift of freedom. The withes whereby, for a thousand years, men were bound in body and soul, are broken; the dissolution of that tyranny which stalked, halted and baited the man who dared to think for himself, is fulfilled in our own time, and no longer is it declared to men, "Thus, and thus only, shalt thou think of God and Nature." Man has won three victories; he has vanquished the terrors of the old world, brought forth food, warmth and light upon the face of it, and thus ceased to be Caliban, the earth slave. Then man became a nation; nations strove for the mastery and political freedom; his second victory was won. Lastly, with the earth his servant and his civil rights secured, the final and crowning work remained, to win the freedom of his mind.

As men more and more deeply studied the life around them, they found themselves led into new realms of experience, and to conceptions far wider than they had dreamed of. At last the old and binding idea of force and matter as dual, was seen to be factitious, and most mischievous in this, that it divided the faculty of thought into two worlds—into the several worlds of philosophy and of natural history. The former was to be regarded as the higher and chosen sphere of noble contemplation, though, uncoupled with nature, it brought forth nothing; and the latter had the sterility of neglect. We now see once more that this dualism is a phantom, and that force and matter are but one subject under two names. Natural processes are no longer to be regarded as the work of inert atoms, whipped by tangential agents; nature herself is no longer to be studied as a mere framework, pumped by a vital principle, which is itself the nobler object of pursuit, but which submits not to a like study, eluding inquiry or subject to a special and alien kind of illumination.

But when we have learned that matter and force are one, that atoms are force-dust, and that we are in the presence of infinity in either sense, inward or outward, then we know that the soul may be kindled and the mind fed by depth of penetration as richly as by the loftiest aspirations. As Browning tells us, in Paracelsus, "to know rather consists in opening out a way whence the imprisoned splendor may escape, than in effecting entry for a light supposed to be without." The very terms materialism and idealism thus cease to signify an opposition, and fall meaningless to the ground, and the microscope is seen to be as true a source of inspiration as the *Paradise Lost.* No longer, then, thrust back from scientific progress by the reverence of antiquity and the authority of those of high repute in philosophy, which have held generations of men as by an enchantment, we have now, in the last fifty years, seized upon the real strong-

hold of truth, and have added to the riches of the knowledge both of universe and mind, in a measure unexampled in the former history of man. We have won that freedom for our great workers and thinkers, which gives them power to speak and spread forth their doctrines openly.

Till these studies are more complete, and as yet they have scarcely begun, we cannot hope for a system of medicine, but must content ourselves with a mere *corpus prescriptionum*. Toward this higher phase of our own art let us strive. Until we can eliminate the chief morbid factors which affect us from without we cannot understand our failures from within. In his treatise on "Airs, Waters and Places," Hippocrates laid the foundations of the study of the external factors of life; it has been left to our own day, and to such men as Pasteur, Lister and others, to advance this research from the study of the inorganic factors to that of the organic. Another great and curious department of knowledge has been opened out to us in the embryological interpretations of the phenomena of disease; these being traced either in arrested development, as in many defects and deformities of body and mind, or in retrogression, such as leucocythemia. The comparison of embryonic periods in the same and in different animals may be the master key even to the diatheses themselves, as may be suggested, for instance, in the chief functional disorder of lithiasis, wherein the formation of urates in place of urea is the resumption of a state normal to inferior types. The strumous diathesis, again, is, it would seem, a permanent arrest of development at a stage short of the highest, and may indeed be, and commonly is, artificially attained by exposure to conditions such as deprivation of light, etc., acting in arrest of completion of growth, as we know that they do in the case of the lower forms of life. The later work of our histologists is full of suggestions of this kind, drawn from the study of heterogeneous growths. Many great lines of thought and observation are thus convergent upon the study of medicine, and are enlarging the foundations of the science, upon which alone the successful art can be reared. What we have then to-day to proclaim is, that during the last half century we have ceased to build castles in the air, have turned more frankly and loyally to nature, and have sought our inspiration and found our reward in the study of phenomena which our forefathers despised as gross and immaterial. As did anatomy, two hundred years ago, so in our own time, has medicine conquered her independence; for this other men have labored, and we are entering into their labors. And although our ways be still dark and slippery, I trust that those who shall be gathered together in our hundredth *Comitia Tributa* may rejoice in a yet more glorious light, and may think gratefully of us of to-day, for in the words of a modern poet—

> "The first still follows one that goes before;
> The last still hears a tolling foot behind."

SECTION OF SURGERY.

In this section the address was delivered by Augustin Prichard, F.R.C.S. After some preliminary remarks, he touched upon the difficulty which existed but a few years ago, comparatively, in procuring an adequate supply of material for dissection. It was but a few years after the passage of the Anatomy Act, an uncle of mine, a very promising young man, died of disease of the chest, the effects of cold caught by being locked up with a fellow student half the night, in a damp cell, in his wet clothes, having been caught while out on an expedition such as I refer to. These events were long ago, it is true; but we can hardly admire sufficiently the zeal, born of necessity, which took these young fellows out after the work and amusements of the day was over, at the smallest hours of the morning, dressed as laborers, and armed with lantern, shovel and pickaxe, to some dark churchyard, then dig open the newly-filled grave, get out the body, and drive it home in their gig before the town was astir. A late colleague of mine, who taught anatomy in Bristol, under these difficulties, in what some of you may consider prehistoric times, has, before now, shown me a heavy bunch of huge keys, all ticketed, which were duplicates that unlocked all the churchyards of Bristol and its neighborhood. Some few of the stories connected with these events have been published from time to time, in Sir Astley Cooper's life, for example; but there are members of our profession still living who shared in these dangers and difficulties, and it would be well worth while if some one would collect some authentic account of these doings, before the whole generation passes away, and before they come to be considered an incredible and impossible part of our professional history; and to make this suggestion is one of my reasons for touching on the subject.

After deprecating the undeserved and unwise neglect of venesection in appropriate cases, which obtains to day, the speaker touched upon counter-irritation, which he considers a most important means of treating chronic disorders.

We are now taught to look with suspicion, if not with dread, on a drop of pus; our predecessors called it laudable; and in my time numerous and ingenious were the devices to produce a suppurating surface. I have no wish to defend the treatment, such as I saw formerly, when Dieffenbach and Jüngken, at Berlin, and Velpeau and Roux, at Paris, after an amputation, would fill the stump between the flaps of skin with dry charpie, before bringing them together with bandages, to ensure a good suppurating surface. The mortality after these amputations was a sufficient warning against the plan; but for chronic joint disease, for chronic eye disease of various forms, especially the chronic inflammation of the cornea, for chronic inflammation of the middle ear, and I believe, for a very much larger number of chronic internal maladies in the domain of the physician, a seton or issue, or some other discreet mode of counter-irritation, is of the greatest service, and not nearly often enough used.

Some good operations have been dropped into disuse on account of fashion or some other equally irrational cause. Some such inadequate cause no doubt first started the growth of the great medical imposture, homœopathy, which has attained such a development among us; and although it has invaded the territory of the phy-

sician much more than ours, I nevertheless think that it has had the effect, in some degree, of discouraging, or diverting into the wrong channel, the search for pathological truth.

Before the time of anæsthetics, operations were performed with great rapidity. I think that I have noticed, as far as my opportunities go, a tendency to greater deliberation and slowness of procedure in operating; and this I hold to be a mistake, for I am convinced that the shorter the time that the patient is under the influence of an anæsthetic, and in the hands of the operator, the better.

There is an operation which, after resuscitation, is in great danger of being buried again, and I should like to say a word against its reinterment. I allude to median lithotomy. There will always be difficult cases of stone in the bladder, which lithotrity, with all its improvements, will not be able to touch, and which must be cut. The advocates of the median section, and I confess myself to be a warm one, contend for it that, while it is equally efficacious, it is, in the adult, a less dangerous proceeding than the lateral operation. I have not such frequent opportunities, as I had formerly, as one of the acting surgeons of the Bristol Royal Infirmary, of performing lithotomy; but I have done no other kind of cutting operation for stone for many years, and in any future case should certainly have recourse to it again. In the young boy, the operation is more difficult; and although the usual lateral section is very little fatal in young subjects, I think that the median has two definite advantages. There is less risk of hemorrhage from a cut in the middle line, wherever it is, and the little patient is able to hold his urine sometimes from the actual date of the operation, or the next day, but always much sooner than when the neck of the bladder has been divided laterally. In many cases they have been known to get up and run about the room in two days. In the case of the adult, the wound would not be so deep, there is little or no fear of bleeding, and the power of retaining the water in the bladder is not so completely lost. I have removed stones weighing upward of three ounces, by this method, without any difficulty.

Surgery claims for herself her full share of the wonderful inventions and improvements of this energetic age; and no one may foresee what wonders the next twenty years may bring forth. She is going on in nearly parallel lines with her sister, Medicine, having the same terminus to reach, viz., the relief of human suffering; and at the many points where the lines closely approximate we get the benefit of the recent therapeutical discoveries which she has made, while we, on the other hand, more than repay the debt by the help we are frequently called upon to give.

SECTION OF ANATOMY AND PHYSIOLOGY.

Dr. George M. Humphrey delivered the address in this Section. Touching upon the divergence of physiology and anatomy from one another, he said that it was perfectly natural. As the several members of the great family of science grow older they grow larger, fall away from one another, occupy independent ground and independent laborers, and form centres from which new individualities will in time bud off. In the present instance the separation is, in the main, due, and is the natural and necessary result of, the development as well as growth of the younger of the two sisters which, during the last half century, has been not only unceasingly but in geometrical ratio expanding. It deals with minute structure and the associated delicate processes, leaving to anatomy the investigation of the coarser structures of the body, those which can be carried out with the naked eye. Anatomy is so nearly complete as a science that it is but little progressive. The books on anatomy contain little or no allusion to the practical import of the several structures and their disposition, and the methods of description have usually no reference to this point. All the features are placed too much on the same level, without light and shade, and the whole landscape proves to be proportionately dull and uninviting. This is alse a result--I fear an inevitable result--of that increasing subdivision of labor which causes the investigation and teaching of anatomy to devolve more and more upon the pure anatomist. Moreover, the anatomist does not seem sufficiently alive to the value of that kind of physiological knowledge which is the proper associate of anatomy and which appertains to it in the same way as the study of process appertains to the study of minute structure. Too often the bare naked facts are marshaled in solemn dullness, one after another, and are crammed down the reluctant throat of the student, without spice or flavor of any kind, not to be digested, but to be gulped again, much as they went down, under the examination squeeze. I regard anatomy not only as the veritable basis of medical knowledge, but as the veritable basis also of medical education, and I therefore wish it understood that I by no means deprecate the pure, simple study of anatomy, and it is no small satisfaction to me to have the opportunity of seeing the senior wrangler and the senior classic humbly and cheerfully bending in the dissecting room and applying the earnestness and ability which has gained them their high positions to the elucidation and appreciation of the disclosures which their own forceps and scalpel can make.

Thus, as I grow older, I grow stronger in my respect for anatomy *per se*; but I grow stronger still in my estimation of its capabilities to excite interest, to nurture inquiry, and to strengthen the mental faculties by virtue of the practical and physiological expositions which are its legitimate accompaniments. I feel that its educational as well as its practical value would be greatly increased, if the relations of form and structure to disease and accident and treatment were more fully pointed out. A careful and accurate description of the form of the tibia, for instance, may be and is good in itself; but an account which associated that form with the liabilities to accident and disease, with the various distinctive peculiarities of the human form and gait, with the laws of growth and development, would be far more improving and impressive, because more instructive and suggestive. A student looks at the *plantaris* muscle in the leg. He wonders what need there is for it, and how it comes to be there. He sees that any slight as-

sistance it may render to the great calf muscle is scarcely a sufficient pretext for its existence in a separate form, and he finds relief and pleasure in learning that this little muscle is an *attaché* to the short flexor of the toes; that its severance has been caused by that projection of the heel-bone which is one of the attributes of the erect posture; and that, when it is continuous with the foot-muscle, as is the case in most of the lower animals, it is clearly seen to be the homologue of the *flexor digitorum manûs*. Possibly, he may still indulge in the luxury of speculating as to the law of evolution, by virtue of which it has maintained its individuality through so many ages of comparative uselessness. He looks with vastly increased interest upon the construction of the great toe, when he learns by what slight modification from the lower animal form that solidarity has been given to the human foot, upon which, more than upon any other single specialty in his anatomy, the preëminence of man is due; and he views with respect the flexor and the middle extensor of the thumb, upon finding that the complete segmentation or separation of these muscles from their surroundings is to assist in correlating the free mobility of the human pollex with the fixity of the human hallux. He is agreeably surprised to find that the dry bones in the open valley of the class room are made to live and stand upon their feet, an exceeding great army of instruction and interest, when breathed upon by the teacher, and clothed by him with the warm flesh and blood of development, morphology, mechanical purpose, and practical bearing.

I have said enough to show my hope and my confidence that the anatomy of the coarser structures, with its attendant physiology, will not be allowed to pass into the category of subjects dead and barren as regards scientific character; but that it will be more and more cultivated, not merely for its practical value, but as a repertorium of scientific interest.

With regard to the special subject of physiology, which has relation to minute structure, and more particularly to composition and processes—that is, the *changes*, chemical and physical—of structure, we may be sure that it will never cease to command interest and to engross a large share of attention. It will always be able well to take care of itself. It is essentially and rapidly progressive, and it is illimitable. Its investigations lead in those directions in which there must ever be a near border-land of the seemingly mysterious and inscrutable, to fascinate and tempt the inquirer on. It dives into the deepest recesses of nature's works. It brings to its aid, and gives the greatest range to, chemistry, physics, and mechanics, and advances with them, its progress being checked mainly by their imperfections. It profits by the newest refinements of optical and other instrumental apparatus. Its searchings cannot be confined to dead matter. The very essence of the science demands that the processes, "living as they rise," should be submitted to its scrutiny. It is quite certain that this must be done, and will be done, largely, whether in England or abroad, whether in this generation or the next, whether under Parliamentary control or under trust in the good feeling and conscience of educated men.

The greatest accession to knowledge in medical science which has been made during the era of this Association—one, indeed, of the greatest ever made—is that included under the term "cell-development," which was worked out, in the first instance, by Schleiden and Schwann. This has caused a re-casting of all our ideas of nutrition, including development and growth; and has, at the same time, given an entirely new ground to the science of pathology; for it has shown that the agents which are the media of nutrition are the media also of those modifications of nutrition which we call disease. It has taught us that a malignant cancer growth is probably the result of a perversion of, perhaps, intrinsically only a slight departure from, the ordinary and normal processes of cell growth in the natural tissues; and the suggestion brings with it a ray of hope, that these deviations may one day be checked or prevented, and that this most terrible scourge of humanity may be amenable to treatment. Associated with this great theory are the investigations respecting the movements, the migration, and the absorbing properties of leucocytes, which, as well as the investigations respecting the influence of the medulla oblongata and other ganglionic centres, great and small, upon the action of the heart and blood vessels, and the investigations respecting the formation of sugar and albumen and their modifications, have a very direct bearing upon various pathological processes, and upon some of the most common and important diseases, and must lead to the better treatment as well as the clearer knowledge of those diseases.

The Dangers of the Dairy.

The *Medical Times and Gazette* reports the following instructive case: In the course of a house-to-house inspection, by the inspector of nuisances, he found a family, four members of which had been ill from smallpox during the previous five weeks. No medical man had attended the first case, nor had anything been done to prevent the spread of the disease, either in the house or out of it. The whole family was in a filthy and neglected condition, and the head of it was a man, who, during the five weeks, had been in constant work, in the employment of a dairyman, his duties being the delivery of milk. The existence of the disease in his family had been kept from the knowledge of his employer, who, however, dismissed him from his service on learning from the Board the circumstances of the case.

Professor Von Langenbeck's Successor.

The *Medical Times and Gazette* says that the *Berliner Klinische Wochenschrift* makes the following observations upon the difficulties which lately arose in supplying a successor to Langenbeck: "Our readers are aware that not only Billroth, of Vienna, but also Volkmann, of Halle, declined complying with the call to Berlin. We cannot but, in the interests of our University and city (a large circle in which has manifested great

interest in this nomination), express the liveliest regret at the refusal of two such men, whose names, especially that of the former, must necessarily present themselves when the first German surgeon is sought to be obtained for the chief city of the German Empire. It would, however, be entirely untrue to assign these refusals to any other cause than the personal relations which both clinical professors have established with their respective Universities. And Volkmann's refusal is a strong proof how little reality there is in the fear created phantom that a powerful centralization is to be dreaded. If a town and University like Halle can maintain a rivalry with Berlin, and fetter the wishes of a power of the first rank, this shows how far we, to our great joy, are removed from the condition of things which prevails, for example, in France, where such an occurrence would be an impossibility."

A New Sanitary Association.

Under the presidency of Dr. Cameron, a meeting has been held in Liverpool, to establish an organization, to be called the "Northern Sanitary Association." The object is to provide the best practical advice on sanitary matters at a moderate cost, and to advance sanitary knowledge. A resolution was adopted in favor of such an association, which was influentially supported, the Earl of Derby being the president.

Factory Legislation in France.

Fresh powers for enforcing an old Act of 1848, regulating the duration of the day's work in factories, have been obtained from the Chamber of Deputies by the French government. This law, which fixed the maximum length of a day's work at twelve hours, had almost fallen into desuetude. The inspectors under the Act will be largely reinforced, and the condition of working children is to receive special attention.

Items.

—Prof. Zuckerhand'l has been appointed Professor of Descriptive Anatomy in Gratz.

—The yellow fever prevails as an epidemic in Pensacola, and there is much distress there.

—Diphtheria is reported in a malignant form in some localities in western Pennsylvania and West Virginia.

—In Berlin, during last year, 1809 persons lost their lives by accidents, and 411 persons committed suicide.

—Prof. Fritsch has been elected as Professor of Gynæcology in Breslau. He is the successor of Spiegelberg.

—The position of Professor of Morbid Anatomy in Paris has not been given to Hayem; Coruil has been appointed.

—The Norristown Insane Asylum, in this State, is attacked in the newspapers, for alleged brutal treatment of patients.

—Prof. Joseph Decaisne, the celebrated botanist, died in Paris a few weeks ago, at the age of seventy-six years. He was a pupil of Jussien.

—In Vienna the city government has given, in honor of Skoda, to a recently opened street near the "Allg. Krankenhaus," the name of *Skoda-Gasse.*

—The celebrated naturalist, especially known for his studies in zoölogy and geology, Desor, Professor in Neuenburg, died recently, in his 72d year.

—As candidates for the chair which, at the University of Gratz has become empty by the call of Kundral to Vienna, Prof. Eppinger (Prague), and docent Dr. Weichælbaum (Vienna), have been named.

—Professor Klebs, who gave, by his researches into the cause of typhoid fever, some reputation to the University of Prague, has accepted a call from Zürich, where he is now Professor of Morbid Anatomy and Pathology at the University.

—Six more of the celebrated anatomical plates of Mesal, which, after a drawing of Tizian, were cut in wood by Kalkar, have been detected by an accident. They had been bought from a second-hand dealer, and possess an enormous value.

—On August 31st, the Union Medical Association, composed of physicians of Pennsylvania and Maryland, held its fifth annual meeting at Wildcat, Lancaster county. An address was delivered by the President, Dr. W. Stump Forwood, and an enjoyable day passed.

OBITUARY NOTICE.

DR. EDMUND L. B. WALES,

who died at his residence at Tuckahoe, N. J., on August 18th, was a gentleman well known throughout the State of New Jersey, as well as in this city. During his extended professional life he acquired considerable reputation, and through successful financial operations accumulated a very large fortune. For eighteen years he was Lay Judge of the Court of Errors and Appeals at Trenton, N. J. His death was caused by cancer.

MARRIAGES.

COE—WERDEN.—In New Haven, by the Rev. Jos. T. Duryea, D.D., of Boston, Dr. Harry C. Coe and Miss Sara Werden.

REED—BEAZELL.—July 20th, 1882, by Rev. Geo. MacDonald, John W. Reed, M.D., and Miss Mary M. Beazell, all of Beallsville, Monroe county, O.

VAN DEUSEN—HAPPER.—At the house of the bride's mother, Mrs. Sarah Happer, in Albany, Ill., August 16th, 1882, by Rev. Thomas Galt, of Aurora, Ill., Dr. Robert Van Deusen and Miss S. Belle Happer, both of Albany, Ill.

WILDMAN—COLLIS.—In this city, on the 9th of August, 1882, by the Rev. Charles Citcateri, Dr. Wm. Wildman and Miss Lizzie Collis, youngest daughter of the late Wm. Collis.

DEATHS.

BUDD.—At his residence, in Mount Holly, N. J., on August 14th, 1882, A. E. Budd, M.D.

REYNOLDS.—At the residence of his uncle, Mr. Daniel H. Brooks, at Port Chester, N. Y., on Friday morning, August 18th, Dr. James B. Reynolds.

SUMNER.—Suddenly, in Brooklyn, on Thursday, August 31st, 1882, Albert E. Sumner, M.D., in the 42d year of his age.

TOMES.—August 28th, at his residence, No. 502 Cleason avenue, Brooklyn, Robert Tomes, M.D., in the 66th year of his age.

WALES.—On August 19th, at Tuckahoe, N. J., Dr. E. L. B. Wales, aged 77 years.

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Communications.

FŒTAL MEDICATION.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

That the normal status of the fœtus in utero and its continued viability to the date of its birth depends largely on the normal condition of the mother's life fluid—the blood—needs no argument at my hands. It is a well known fact. Not only do we know any dyscrasia affecting either parent may, and often does, leave its ugly impress on the fœtus, but also that it may even destroy its life. We know that infants have been brought forth with the variolous pustule already well advanced in development. The fearful loss of fœtal life because of maternal contamination with syphilis while pregnant is not less an established fact. It is not less well known that some forms of acute infectious and inflammatory diseases cause the death of the fœtus in utero, and lead to abortion or miscarriage. Notably, variola and pneumonia produce this result in the pregnant woman, especially so if well advanced in her term. All these and other well recognized clinical observations in this connection need only to be mentioned—they are long well recognized facts.

Not less is it well known that the fœtus is sustained in its viability, is nourished and acquires its material for growth, up to the time for the commencement of independent existence, from the blood of the mother. Not that there is a direct vascular connection with the arteries and veins of the mother. But the osmotic principle gives a connection sufficiently close to admit of free passage of the circulating medium from the mother to the fœtus and return. That this occurs rapidly will be demonstrated further on, and has been many times proven by experimentation. Have we taken sufficient note of this fact from a practical point of view? Have we considered that we may medicate the fœtus at will through the medium of the mother's blood? It is true that medical men have, and do now, make some use of this knowledge; but may we not widen the field, and by doing so add much to the comfort of the mother in some instances, and much to the chances of the continued viability of the fœtus as well as to its future health prospects.

If a pregnant female comes to us with the statement that she has had several abortions or miscarriages, and is now anxious to bring forth a living child, we deem it to be our duty to carefully treat the case. We inquire into her history and also that of her husband. We may not always find some marked dyscrasia present in either of them, but generally we shall find evidences of syphilitic contamination or of a morbid condition that prevents continued fœtal viability to the end of the term of pregnancy. If the blighting cause is a specific poison, then antispecific remedies are demanded. There is no need for me to refer to the many cases already given in medical literature, to show that a pregnant syphilitic woman may be so treated as to bring forth a seemingly healthy child, though many failures may have fallen to her lot before specific treatment was instituted in favor of fœtal viability. True, it is easy to ask, "May

she not, in this instance, have brought forth a seemingly healthy child?" No one can positively say yes or no. But clinical experience has proven that the chances of continued fœtal viability under these circumstances are far greater when anti-specific treatment is persistently used then when it is not.

Other causes than syphilis may produce the death of the ovum, as insufficient placental respiration, anæmia, etc. These can be met as the special cases may require.

Some years ago I treated a young man for primary, indurated chancre. After the ulcer was healed, but before secondary lesions were manifested, he married a fine, healthy girl. He did not ask advice as to whether it was best to unite in wedlock with one who was pure and innocent. In less than a year his wife came to me with a well marked syphilitic eruption, and gave a clear history of vulval sores. She had inguinal and post-cervical adenitis, sore throat, etc. She was placed on anti-syphilitic remedies. In three months more she came, with evidences of conception, and a few marks of constitutional syphilis still visible. The condition of the husband was that of a marked syphilitic. He had been all too indifferent to his situation and advice concerning his case. By persistent efforts I kept the mother on her anti-syphilitic agents. At term she was delivered of a large, healthy looking boy. No marks of contamination were present then, but within a few months there was undoubted evidences presented by the infant, to show that it had not fully escaped the baneful poison. Under treatment, however, it grew and thrived quite well. How much influence the treatment had in this case I cannot say, but the results were, I think, very good, considering the untoward conditions under which this child was conceived and delivered.

In another similar case that came under my care about the same time, all the clinical circumstances being quite exactly the same, the woman refused regular and persistent treatment. She was treated for about six weeks during the early months of pregnancy. The fœtus was thrown off during the eighth month, a mass of decomposition, and the mother was a great sufferer from syphilitic lesions that had remained practically without any treatment for months.

Mrs. V. came to my office in 1870, saying that she had had five successive abortions and was again pregnant. I did not recognize any syphilitic marks in her case at that time, though it was one where such contamination was to be expected. I afterwards learned that her husband had suffered from syphilis before marriage. The woman was thin, anæmic, feeble, run down. I placed her on the persistent use of tincture ferri chloridi, with hydrarg. bichloridi. As she was anxious to be delivered of a living child at term, she was readily induced to take the remedies. She went to full term, for the first time, and gave birth to a seemingly healthy, male infant. After that she had four or five pregnancies, all successful. She took the same treatment during the second successful pregnancy as the first, but not after that. She was often weak and anæmic during those years, and I often added anti-syphilitic agents to ferruginous tonics prescribed for her. She had several times showed undoubted evidences of constitutional syphilis. Here was a case where success crowned efforts in the interest of fœtal viability in a marked degree. True, no one can say that she would not have carried the sixth conception to its full term, but the inference can but be very strong that she would not have done so without proper treatment.

Other and unrecognized causes than those above named are often at work blighting the fruit of the womb. Perhaps every physician of considerable experience has met with instances where both the husband and wife seemed to be entirely healthy. Yet about the close of the fifth to the seventh month, or at most, the eighth, the fœtus would die and a still-birth would be the result. No perceptible cause is known. No recognized dyscrasia is present. Under these circumstances I do not believe we need to stand utterly powerless in all cases. If there is not sufficient placental respiration to maintain the viability of the fœtus, we should resort to the use of those agents that will aid in giving the needed respiratory power, or so far change the blood of the mother as that fœtal life may be sustained to the close of the pregnant term.

Simpson advocated the use of the "alkaline salts for facilitating placental respiration in instances of morbid placenta." Of this plan, Prof. Reamy, of Cincinnati, says he believes it "is of more scientific value than is generally believed by the profession (*Obstet. Gaz.* May, 1882, p. 240.)

Dr. Thrush, of Cincinnati (*loc. cit.*), in discussing this point says, "Two premature births had taken place in two successive pregnancies, the one at five and the other at seven months' gestation, intra-uterine death of the fœtus, from fatty degeneration of the placenta, being manifestly the cause of the premature delivery in the second pregnancy. No special constitutional vice was discernible in either husband or wife. This lady,

in her third pregnancy was placed simply upon a systematic course of chlorate of potash, as recommended by the late Prof. Simpson, together with suitable hygienic precautions; the result being that the respective labor occurred at the normal end of utero-gestation, and terminated in the birth of a fully developed, vigorous child."

In cases of this kind, Mr. Grinsdale, of London, claims success with chlorate of potash in a number of cases; not where a constitutional vice is present, but where there is diseased placenta or other reason present why the fœtus was rendered non-viable.

If chlorate of potash has such power as to add to respiratory ability of the placenta, or to so far change the maternal blood, and add to its alimental powers for the fœtus as to render better the chance of continued fœtal viability, may we not have other agents equally good? May not the tinct. ferri chlor., as given in the case of Mrs. V., have had a like effect, as well as that of enriching the blood of the patient. Very able men have advocated this very use of the tincture of iron, and have given as glowing accounts of its utility as have the followers of the plan advocated by the late Prof. Simpson. As the circulation by osmosis, at least, going on between mother and fœtus, is sufficiently free, why should not proper remedies properly used have such influences as are here ascribed to them?

Rhigini has noted that iodoform, when administered to the pregnant woman, is soon to be found in the liquor amnii. Dr. Kubasson (*Compend. Medical Science*) has, by using the microphone, observed the effects, on the heart of the fœtus, of medicines taken by the mother.

1. Chloroform and chloral hydrate he finds have first a stimulant and then a sedative effect on the fœtus, this last effect being evidenced by the dullness and infrequency of the heart's beat, and the greater quietness of the fœtus. They act within five or ten minutes, chloral more powerfully than chloroform, and especially so if given per rectum.

2. Opium and its alkaloids cause prolonged irregularity of the heart's beat in the fœtus, acting more slowly but for a longer period than chloral or chloroform. Opium acts more powerfully per os than per rectum.

3 Digitalis has also a powerful and prolonged action on the fœtus. Dr. Kubasson believes, from chemical examination, that a dose of chloral-hydrate taken by the mother is divided, within fifteen minutes, between herself and her fœtus, in proportion to their respective weights. The practical conclusion is that a dose of more than thirty grains of chloral hydrate will be dangerous to the child if given at once, per rectum, or repeated sooner than in half an hour. The same holds good for one and a half grains of opium in tincture repeated sooner than in an hour. (*Medical Press and Circular.*)

If these statements of Simpson, Rhigini, Kubasson and others are true, they can certainly be made of practical utility in many cases in practice, not only to combat the syphilitic dyscrasia, so destructive to fœtal life, and not only in cases of any other recognized dyscrasia, or of fatty degeneration of the placenta, but also in many cases where fœtal movements, from their violence and long continuance, cause great distress and even the threatening of premature delivery. A little clinical personal experience in this connection may illustrate at least one of the ways in which this knowledge may be used with great advantage and comfort to the patient, and no loss of credit to ourselves. In 1866 my attention was called by a lady in her eighth month of gestation to the very strong movements of the fœtus. She said there were times when it was quiet enough for her comfort. But also there were whole nights that she could not sleep or get any rest, on account of its incessant movements, and at times the pain caused by its motions was difficult to endure, on account of their severity. Placing the hand over the abdomen I found its gyrations were to be distinctly felt, and their force and strength were surprising. Being asked to prescribe I was somewhat puzzled. This was a new form of difficulty, undescribed in books or by teachers, as far as I then knew. And my then limited experience in obstetric practice led me to doubt whether I should attempt to do anything. However, as the uterine irritation was quite marked, and the pains were not altogether unlike those leading to miscarriage, I concluded to give her a tolerably full dose of opium. I did not expect to quiet the fœtus, but to allay, in some measure, the irritability of the uterus and control the pain, and so render its movements more bearable. In less than an hour the pain had entirely subsided. But it was also noted that the little uterine inhabitant was as quiet as a sleeping baby at midnight. This effect I thought might be simply accidental. The lady, however, was instructed to repeat the dose of opium only when a repetition of forcible movements seemed to bring on distressing pain or to cause threatened miscarriage. On inquiry, a few weeks later, I found that she had several times resorted to the anodyne powders, and they never failed, not only to relieve the pain, but to also

quiet the fœtus and check his forcible gyrations. From that date to the present, quite a large number of similar cases have come under my notice, and very many times have I resorted to this practice with quite uniformly good results in giving relief to the pregnant woman. No known or discovered injury has resulted to the fœtus from this practice.

Mrs. L. called on me in her eighth month of gestation, third pregnancy. She was having very severe uterine pains, and the character of them might easily have misled one to suppose she was suffering from colic. A close investigation of the cause of the pain led to the discovery that the fœtus was in violent agitation, and its incessant motions seemed to cause the pain, and the pain was proportionate to the force of its movements. I gave her a full anodyne. In less than an hour the pain was all gone, and the fœtus was also very quiet. She had several repetitions of this experience, but the suffering always ceased when the fœtus became quiet, and one full anodyne dose always gave the needed relief.

I will refer to one case more, as a fair type of quite a number with which I have met in obstetric practice.

In June, 1881, I was hastily called to see a young, stout, married lady. She was hale and hearty, a primipara, that had enjoyed the best of health. She stated that she did not think her time was up for a month or more, but might be mistaken. On examination I found the neck of the uterus very little, if in any extent, obliterated, being, as yet, quite its normal length, and no sign whatever of the beginning of real labor. But I further at once noted that the little uterine occupant was kicking around his narrow apartment at a furious rate, and that the pain was proportionate to these fœtal gyrations. If the fœtus became quiet for a time, there was a complete cessation of uterine pain, and when the little uterine occupant would again commence his furious motions, the pains instantly returned, with proportionate severity. I told the lady that I judged her time for delivery would not be out for perhaps two months, and that the false alarm and pain now endured was induced by the movements of the fœtus. I gave her a full anodyne, waited an hour, and all became quiet. The fœtus had ceased his summersaults, and no further pain was present to distress the lady or alarm her friends concerning a miscarriage. She was not confined for nine weeks after that date, but had several times to resort to the anodyne for relief from the pain caused by the fœtal movements. There was no occasion for the use of the anodyne, nor any pain present at any time, except that seemingly caused by her very restless uterine occupant.

This is but one of a large number of similar cases coming under my notice, and which I have managed in this way with quite uniform success, as to the relief afforded to the mother and producing quiet of the fœtus. I think these instances show clearly that the fœtus may be medicated with quite a fair degree of success, and that when its remedial needs are known we may often meet them with a tolerable degree of promptness and certainty. Moreover it has been my experience that most of the so-called "false alarms" of labor, that so annoy and provoke both the pregnant woman and her attendants, are caused by fœtal movements, and that the pains cease whenever the little uterine inhabitant is made quiet by any anodyne or hypnotic. I certainly also have attended cases of labor where the uterus was opening its mouth, and all seemed ready for delivery, and yet not a pain would be felt, only as the fœtus would move forcibly. It is easy to quiet the fœtus, if deemed best, but it may not be always wise to do so in such a case.

No injury has resulted to the fœtus from this treatment in my hands, though one can easily see that fatal results might follow too large or frequently repeated doses of any powerful anodyne.

The fear of establishing the opium habit is quite groundless. In no case coming within my experience in this line of practice have I had occasion to give more than six or eight doses of any anodyne, and as this number of doses is stretched over a space of from one to two months, the doses being generally one to two weeks apart, it will at once be seen that any dangers of establishing the opium habit are quite at a minimum.

From what has been stated we think we may conclude—

1st. If we may depend on the results of the experiments of Rhigini and Kubasson, that remedial agents given to the pregnant woman will promptly affect the fœtus, and the effects will be proportionate to the dose.

2d. The fœtus of a syphilitic mother may have its chances of continued viability greatly increased by proper anti-syphilitic treatment persistently used during pregnancy.

3d. Any recognized dyscrasia of the mother that is likely to destroy the fœtus may be often met and fœtal viability secured to the end of the term of pregnancy, by administering the remedies to the mother.

4th. In cases of fatty degeneration of the placenta or other placental disease, the continued

viability of the fœtus may be secured by sending to it better blood, *i. e.*, by enriching the mother's blood, or increasing the power of placental respiration, through the use of the alkaline salts, iron, etc.

5th. The movements of the fœtus may be promptly governed by administering anodynes to the mother in fairly full doses.

6th. The internal administration of any powerful therapeutic agent may lead to the death of the fœtus, and hence, to abortion or miscarriage.

IS MEDICINE A SCIENCE?

BY A. H. CARRIGAN, M.D.,
Of Washington, Ark.

Read before the Hempstead County (Ark.) Medical Society.

I was stopped on our streets not long ago, by Judge John R. Eakin, of the Supreme Court, and Judge A. B. Williams, of our Circuit Court, and asked the question, "Is medicine a science?"

Judge Eakin had informed me previously that Judge McClure, of Little Rock, had made an address before a literary society of that city, in which he took the position that medicine was an empiricism and not a science. Hence the following remarks:—

The term science is very hard to define. We speak of a scientific work; it may be a mechanical structure, a book, a painting, or any other thing done in accordance with known principles. Science literally means something that is known, or to know; then is medicine something that is known, or is it an empiricism? This is the question we propose to discuss. Empiricism means to pretend to know something that we do not know.

Let us try the rule, and see how it will work. All well informed physicians agree on the knowledge of human anatomy. Name a bone, a muscle, a ligament, a vein, or an artery, and every well informed physician in the world will be able to lay his hand on it. They agree further, viz., as to what are the functions of these organs, tissues and structures, as far as is known. Now, anatomy is one of the branches of medicine and a science; not a completed one, but, perhaps, more nearly completed than any of the branches of medicine.

Physiology is another branch of medicine, which teaches the laws of life, from the simplest cell to man, the highest type of organzied being, as manifested in health; and pathology teaches the laws governing the same structures in a diseased state. These laws are known and acknowledged by all well informed physicians of every school. Many of these laws are demonstrable, and the others as much so as the laws of gravitation, which all scientific men acknowledge to be true. No man can demonstrate what life is, yet no sane man would deny that life is. Then we say these laws of life in health and in disease are known and uniform, and that all well informed physicians know and acknowledge them to be so. Is physiology a science or an empiricism?

Materia medica is a branch of medicine, or rather it is a history of the origin, composition and effect of the agents with which physicians combat disease. This embraces a knowledge of botany, chemistry, pharmacy and therapeutics. The first three are exact sciences and capable of demonstration. The last, therapeutics, is where the greatest irrationalism does exist and has existed in all the past. It is in this branch of medicine that quacks and patent medicine venders find the widest field to ply their calling; and it is not to be wondered at that they exert an influence upon the ignorant masses, by placing their almanac medical lore freely in the hands of every man; but from the better informed classes, such as lawyers, ministers, and newspaper editors, we should expect better things. But the compounders of this patent, vicious stuff, that floods our land, and their blatant, brazen agents, that are found in every nook and corner of our country, with brush and paint, publishing their own and their masters' infamy on every pine log, whitewashed wall and fence, these are the miserable ghouls that are robbing the afflicted among the ignorant poor of our land, and giving them worse than nothing in return. And when we ask the powers that be to paralyze their hands, by compelling them to place upon their box or package the name and quantity of each medical agent that enters into these wonderful compounds, we are too often refused, with some unkind remark.

But it is of the better informed classes that we propose to speak more at length. It is by these classes that we are too often sneered at and called empirics, because we fail in one of the branches of our learned profession, forgetting the fact that in the very nature of things, it is impossible to always be exact or even to approximate a demonstration.

Even in this, nearly all well informed physicians agree, as to the use of remedies; and by the practice of vivisection we are enabled to use on the lower animals the great advances made in chemistry and pharmacy, and to perfect our knowledge in regard to the great number of remedies that we already have. And even in this,

those pseudo-philanthropists are doing all they can to prevent us from using the lower animals for the perfection and advancement of our knowledge in this respect.

They say therapeutics is not a science, and when we attempt to make it, as far as possible, a demonstrable science, they throw every obstacle in our way, and then cry out "empiric."

The other branches of medicine, viz., surgery and obstetrics, are now demonstrable, or our knowledge of the principal surgical operations are known as soon as named, by all well informed physicians, which necessarily makes it a science. The same is true in regard to all obstetric procedures.

People that live in glass houses ought not to throw stones. Is law a science? Let us apply the same rule to lawyers that we do to ourselves. Is law a science? One has said that law was the science of the decisions of the judges. The ancient judges are represented as blind, holding the scales equally balanced, which would indicate that they would weigh out equal justice to all parties.

Such might have been the case in primitive times, but such is not the case now. We see our judges in the highest courts of our country often giving a majority and a minority decision on the same subject, the majority ruling. Is the law then a science, or is it an empiricism? Or the law may be well enough, but the judges may be corrupt; which is it? Take the practice of our lawyers in the common courts of our country, and what do we see? One side or the other evidently doing their best to defeat the objects of justice. In this case the law is the science of doing right and the science of doing wrong, the science of virtue and the science of corruption, the science of doing justice to our fellow-men, and the science of defeating the objects of justice, for lawyers have to know how to do all these things, none of which are expected at the hands of an honorable physician.

Is theology a science? We think not, since one sect teach one thing, and another teaches another thing. To say the least, its teachings are not as uniformly held by its teachers as the scientific principles of medicine. Theology, like therapeutics, cannot be demonstrated, but its teachings can be illustrated in the lives of Christian men and women, which class form the highest type of our civilization, yet its teachers can and sometimes do put on the livery of Heaven to serve the devil in, especially when they underwrite for patent medicine humbugs.

The knowledge of theology is not as universally agreed upon as the knowledge of medicine, by its teachers. Truth is capable of being demonstrated from every standpoint, by all just theories bearing upon it, but many things that we believe and practice, and teach, must, in the nature of things, ever remain only theories, in regard to which, if we can neither believe nor accept them, nor advance a better one on the same subject, self respect would indicate that we had better say nothing.

What shall we say of the editors of our newspapers? We would remark that the press is the power behind the throne, in all civilized lands; it is not the axe or the hammer, the forge or the steam engine, the plow or the hoe, the weapons of warfare or the soldiers that use them; but it is more than all these. It shapes the opinions of the unthinking masses, as well as those that think. It comes to us in our moments of idleness, and we read, it may be but a paragraph; that paragraph may arouse a train of thought that will result in a succession of deeds that may bless or blight the condition of thousands.

Should such a power be used for improper purposes? we think not. But let us see how it is used sometimes. Take up any weekly or daily paper, and you will see some such editorial remark as this: "Black Drop always cures chills." "Everybody uses St. Jacob's Oil." Now all well informed editors know that such statements are not true; and I must say, that a majority of our editors are well informed; yet all will bear witness to the fact, that thousands of such statements can be seen in the newspapers of the day, endorsing and recommending just such patent stuff as we have indicated above. Are the fees these editors get for such statements better than life and health? Surely, they think so, or they would not make them, or they sell false opinions very cheaply, for their opinions, in most instances, sell the stuff to the unthinking masses; and that strangest of cranks in the "human brain, the potency of secrecy," comes to their help with the better informed people, and they are enabled to impose upon them. Thus the editors of our papers inveigle the masses into buying every vicious compound that is thrown upon the market, provided always that the vender has the *money* to pay for such notoriety and the ingenuity to keep anything out of his stuff that will kill at once.

Then, what sort of a science is editing a newspaper? It is the science of all sorts of power, both good and bad.

Let us notice a few things that modern scientific medicine has done for the race in the last

few years, and let these facts answer the question as to whether medicine is a science or an empiricism. The hypodermic syringe is an invention of scientific medical men, by which, when the stomach cannot retain anything, we can soothe and calm the tortured victims of pain, and reach the brain with proper medicines when all the usual approaches are blocked against us. The aspirator is another instrument by which we can safely penetrate any organ or cavity of the body and take away any septic fluids which, if left alone, would in many instances produce death; and Esmarch's bandage, by which we now, in many instances, have a bloodless as well as a painless surgery. Those of us who have racked our brains over the uncertainty of the pulse, know what a blessing the discovery and application of the fever thermometer is, not only to the physician, but to his patients also; and the microscope, by which the educated physician is enabled to understand the nature and cause of many diseases that were formerly as sealed books; also many crimes are brought to light, which without it would never be known. These are a few of the many instruments that modern scientific medicine has brought into requisition to clear up the misty uncertainty of the past, and I would ask any candid, capable observer, have they done it? During the past winter, when smallpox, like a loathsome demon, threatened all parts of our fair land, how many doubted whether vaccination would protect or not? In this field modern chemists have recently cultivated a virus that has been successful in arresting two diseases in the lower animals that always proved fatal to them. These recent discoveries are big with promise to the human race, since by their use we hope and believe, in the near future, to be able to arrest many, if not all, the epidemics that sweep over our land. "Physiological inquiries are pointing out to us the right direction of our therapeutic measures, and lighting up areas to be never successfully illuminated by empiricism." For instance, nitrite of amyl in angina pectoris, hydrate of chloral as a hypnotic, digitalis to furnish compensatory power to a diseased heart, and iodide of potassium to sweep the blood in certain specific diseases; and in jaborandi, or its active principle pilocarpia, with which we can wash the blood of its impurities, even if the patient is unable to swallow; and if some of those flippant, discourteous gentlemen that sometimes practice in our courts would allow us to inject some of this medicine under their skin, we think it would convince them that we understood the science of both making them sweat and spit. But I think I have said enough to convince the most skeptical that medicine is not only a science, but a living, aggressive science, with greater probabilities of brilliant achievements in the future, than in any other department of human effort. When we look at ourselves and others around us, in our daily routine duties, making no advances in scientific discovery, barely keeping up and using the advances made by others, we often become discouraged; but even this unwelcome picture that some of us have to hold up as our life work, has a silver lining, for we belong to a profession which has done, in this our age, for itself, that which no other learned profession in America has done for itself, viz., compelled the respect, admiration and patronage of Europe.

We hardly know what to say or think of any one who still persists in saying medicine is not a science, with all the achievements of the third quarter of the nineteenth century beaming upon them with more than electric brightness, unless they belong to that class described by the poet, when he says—

> "When in sickness, if not before,
> God and the doctor we adore;
> But in health both are alike requited;
> God is forgotten and the doctor slighted."

SCHOOL HYGIENE.

BY T. J. HOPPEL, M.D.

An abstract of an address read before the West Tennessee Normal Institute.

The teacher should study the manner in which his room is lighted. The want of a proper amount of light, and the faulty direction from which the light is admitted, is a frequent cause of myopia, or, discarding technicalities, of short-sightedness. An examination of the eyes of school children and college students, made by Dr. Priestly Smith, showed "five per cent. of school children under thirteen years of age, and twenty per cent. of college students, affected by short-sightedness." Dr. Ware, of England, in a paper read half a century ago, before the Royal Society of London, established the fact that "short-sightedness was much more prevalent among the educated than the illiterate. Cohn, of Breslau, has made more extended research into the matter than any one else, and from his report we find, "in the elementary school 6.7 per cent., in the intermediate school 10.3 per cent., in the high school 19.7 per cent., and in colleges 26.2 per cent. of the pupils affected with the disease in a greater or less degree." "After a full course in the high school, 50 per cent. of the first class, and

in colleges 55 per cent. of those finishing their education, were short-sighted."

Dr Loring, of New York, seriously discusses the question as to whether the human eye, under modern education, is changing from its normal state and becoming myopic.

The Ophthalmological Section of the International Medical Congress, held in Geneva, in 1877, voted its belief in the two following propositions, among others:—

"1st. The ordinary causes of myopia (near-sightedness), are heredity and eye work, the influences of which may be separate or combined."

"2d. The progress of civilization, and particularly of school education, tends to increase the extension of myopia."

The labors of all the different writers upon the subject have conclusively shown a direct connection between the disease and improper or excessive study under imperfect illumination. Teachers, directors, and parents have an interest in school hygiene pertaining to this important question. You see many of the present generation early in life wearing glasses. Not all of these are near-sighted. Some wear glasses because they need them, some because it is fashionable. If you can, in your school room, so manage as to lessen the number of those who are compelled to wear glasses, you decrease the list of those who wear them for other causes. How can you, as teachers, parents, or friends, remedy this evil? Much depends upon the faulty way in which the school rooms are lighted; and, of course, then, much can be done, by way of relief, by knowing the evil and as far as in your power removing it. An insufficient light is a great evil, but an improper light may prove a worse one. A careful study of the subject has shown that school rooms should be lighted from the pupils' side, preferably the left, if possible, and that the windows should occupy an area in the wall equal to at least one fifth of the floor space. If not enough light can be gotten from the left of the room, then admit it, if possible, from the right side; but by no means from the front, or, unless compelled to do so, from the rear. If from the front, the glare of the light is so great as to damage the eye; if from behind, many of the rays are cut off by the child's head; if from the right side, a few of the rays are lost, in right-handed children, by the way in which they ordinarily hold their books; or to express the idea a little differently, the eye should always receive the reflected rays, not the direct ones. To favor the eye still further, windows should be curtained, and those school books should be selected in which the paper is smooth, white, and the type large and distinct. The study of the pupil should be carried on, as much as possible, by daylight; the use of artificial light should be avoided.

Further, if, when you take charge of a new school, you find the light admitted into the school room at a disadvantage, not in accord with scientific investigation, you can so arrange the desks and seats in the room as to remedy the evil to a great extent. Again, the proper slope of the lid of the desk materially aids vision. A book or slate on a level surface cannot be used by a pupil without his or her leaning forward in a constrained position, deleterious both to vision and the respiratory organs. The leaning forward produces a congestion of the whole visual apparatus, resulting in short-sightedness.

The proper inclination of the desk lid for reading or any kind of study is an angle of about 40° or 45°; for writing, not more than 20°. You can demonstrate this fact by having a child with a normal eye read from a book held to suit the eye, and you will find the angle formed by the book so held with a horizontal line, to be about 40° or 45°. Follow nature in these matters. She is generally correct. A movable desk lid, to fix at 20° for writing and 45° for other purposes, would be a desideratum in our school rooms.

A proper relationship between the seats and desks should also exist. The old straight-back bench belongs to the age of the Inquisition, and has long been discarded; but the opposite extreme must be guarded against. From careful research and examination, it has been demonstrated that the front edge of the seat should be in a perpendicular line with the posterior edge of the desk, and should be a little higher in front than behind! while the back, after inclining slightly forward in the lower sixth, should then bend back only a few degrees from the perpendicular. Desks and seats should be adapted to the age and stature of the children in the school room.

The bones of children differ materially, in their component parts from those of adults. There is an excess of animal matter in the bones of children, making them softer and more flexible than those of adults; hence the necessity, in addition to the demands of vision, for a perfectly adapted seat. You, then, are to see that your school is so seated as to best conform to the facts demonstrated, as stated above, in reference to the effects of light upon the visual apparatus, and then to see that your pupils avail themselves of light properly

admitted, by retaining proper positions at their desks, correcting at all times any errors that they may fall into, so as to prevent the contraction of bad habits in these matters, which soon become a second nature. Many cases of near-sightedness have been contracted from the vicious habit of holding the book so close to the face as to prevent the teacher from observing any mischief which the pupil may be doing.

Hospital Reports.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINIC BY ALFRED C. POST, M.D.,

Professor Emeritus of Clinical Surgery.

Cervical Adenitis.

Gentlemen:—This boy, aged nine years, complains of a swollen neck. It is a case of cervical adenitis, an inflammation of the lymphatic glands of the neck, which has gone on to suppuration at this point. I observe, in addition to that, there is a little preternatural fullness in the region of the thyroid body. It is more conspicuous than it usually is, and yet the enlargement is not so great as to be of much importance at the present time, unless it has a tendency to grow. You are aware that the thyroid body is frequently the seat of chronic enlargement or hypertrophy, which is known by the name of bronchocele or goitre, and it presents itself under several different forms, sometimes occurring as a sporadic disease; that is, an individual case occurring here and there, without any special connection with each other; and at other times it appears as an endemic; that is, in certain localities, you find a very considerable portion of the population affected with it. Those localities where bronchocele or goitre occurs in the endemic form are usually deep, shady valleys in mountainous regions, as among the Alps in Switzerland and Savoy, among the hills of Devonshire, etc. This endemic form of the disease, when it occurs in the Valley of Savoy, is frequently associated with a very imperfect cerebral development, and the associated conditions is called cretinism, and the person affected with the disease is called a cretin. In these cases we have an enormous enlargement of the thyroid body, with a very imperfect development of the head. The brain is very small and the stature is dwarf, the ordinary height of a person so affected not exceeding about four feet. In the deepest parts of these valleys a very large proportion of the people are thus affected, the cases differing from the sporadic form, of which the present case seems to be particularly a slight one.

There is a form, however, of bronchocele different from both of those which I have mentioned, and which is known as exophthalmic goitre. In this you have, at the same time with the enlargement of the thyroid body, also a protrusion of the eyeballs, and certain associated nervous symptoms. It is quite a formidable disease. It struck me, on looking at this boy, that his eyes were remarkably full, and it is quite possible that this may be a case of the incipient stage of exophthalmic goitre. I do not pretend to say that it is so, yet; the symptoms are not sufficiently well marked to make one positive, but there evidently is a slight enlargement of the thyroid body, and his eyes are somewhat preternaturally prominent.

You may remember that, some weeks ago, there was a case here somewhat like this one, so far as the cervical adenitis is concerned, in which there was quite a collection of pus, and in which I made a puncture and evacuated the matter, and injected the sack with a solution of carbolic acid, one to forty. This is known as Collender's treatment, sometimes called collendering the disease—distending the walls of the sack with dilute carbolic acid for the purpose of destroying any germs that might exist there, and favoring the healing of the abscess. It is well known that when, without any antiseptic precautions, an abscess is opened, so that air is admitted into its cavity, a certain amount of decomposition takes place, the discharge becomes more or less offensive to the smell, some symptoms of blood poisoning may manifest themselves, according to the extent of the abscess and the imperfect manner in which the matter is drawn off. These unpleasant consequences are guarded against very much by collendering the abscess; that is, by making an opening of moderate size and distending the abscess with dilute carbolic acid, about one to forty; under varying circumstances it may be from one to twenty, or one to fifty. From one to thirty to one to forty is the strength generally used. When the abscess is a large one, some precaution should be used, so that no considerable quantity of the carbolic acid shall remain behind, to produce toxical effects upon the blood. There are cases on record in which not simply a slight ill effect, but a fatal result occurred from injecting too much carbolic acid into an abscess or other cavity. If a considerable quantity of the acid be absorbed, it produces a very depressing effect upon the system, and it may even prove fatal. But in the case of an abscess of this size it is perfectly safe, even if you inject a stronger solution than that mentioned.

Restoration of Divided Nerves.

Case 2.—This man, about twenty years of age, has a scar upon the anterior part of the right forearm, three or four centimeters from the wrist joint, and extending more than half way across the palmar surface of the forearm. The injury which gave rise to this scar occurred about nine months ago, and was caused by a piece of glass. When the hand is thrust through a pane of glass it is very apt to divide the arteries of the anterior part of the wrist. You have there the radial artery, which is on the outer or radial side of the flexor carpo radialis; and very often the ulnar artery, lying on the radial side of the flexor carpo ulnaris, also is wounded, and sometimes there is an intermediate artery wounded, which is known as the median artery, an artery which accompanies the median nerve, which in many persons is lost in the forearm, but in some is nearly as large as the radial or ulnar. Thus, sometimes, three arteries require to be ligated in an accident of this kind. As a general rule, where these

arteries are divided, it is best to tie both the proximal and the distal end. This patient does not know whether these arteries require to be tied or not, but the probability is, judging from the course of the scar, the radial artery was injured; the ulnar may have escaped. You will recall the anatomical distribution of the nerves of sensation upon the palmar surface of the fingers. You will remember that the index finger, the middle finger, and the radial side of the ring finger, receive their nerve supply chiefly from a branch of the median nerve; while the ulnar side of the ring finger and both sides of the little finger derive their nerve supply from the ulnar nerve. Now, it is very evident, from the fact that there is more greatly impaired sensibility here in the index finger and middle finger, and to some extent on the radial side of the ring finger, that the median nerve has been divided, and that its function has not been perfectly restored. You know that when a nerve has been divided, and that ends are left in the wound, pretty near each other, they will reunite, and the function of the nerve, as far as the power of sensation is concerned, would be more or less perfectly restored. Unfortunately, where the nerve is divided for the relief of neuralgic pain, the healing of the parts and the restoration of function occur very much too soon for the comfort of the patient. There are a great many cases of neuralgia where division of the nerve gives relief, but after the lapse of a number of days, weeks or months, the pain returns, and that is one of the misfortunes in regard to the treatment of neuralgia by division of nerves. In order to secure persistent benefit from the operation you not only have to divide the nerve, but exsect a very considerable portion of it. Even *then* there is doubt with regard to the permanence of the cure. The impairment of sensibility and of mobility is what this patient complains of. He can bend his fingers, but he cannot bend his thumb. The probability is that the nervous supply of the muscles of the thumb has been cut off, and it has not been largely restored by anastomosis, for the anastomosis of nerves is by no means as perfect, so far as function is concerned, as is the anastomosis of arteries. You will observe that when the patient attempts to move the thumb, he moves the first phalanx of the thumb chiefly by the action of the flexor brevis, the short muscle which constitutes the upper part of the thenar eminence of the hand. That muscle has not been deprived of its muscular power, but the flexor longis pollicis has been deprived of its power, as he is unable to flex the last phalanx of the thumb.

With regard to restoring the function of divided nerves, there is a difference between the nerves of sensation and those of motion. Restoration of the function of sensation takes place to a much greater degree than that of motion. When the motor nerves have been divided there is much less chance of the patient regaining lost power of function than there is in the case of sensation. It would seem there is more active nervous power required for a nerve of motion than one of sensation; at all events, the fact, I believe, is a general one, that the restoration of motor function is much less perfect than that of sensation. As said, he cannot bend the distal phalanx of the thumb, and I fear nothing can be done to restore that lost function. If he were suffering from any intense pain we might cut down and expose the nerves at the seat of the injury, and if any bulbous expansion were found, dissect it out. We sometimes find an expansion on divided nerves, rendering them the seat of pain, and the excision of such expanded portions will often give relief, and more often give relief which will be permanent. You cannot, however, absolutely rely upon the relief being permanent. This patient does not suffer sufficiently to require such an operation.

Bone Sequestrum.

Case 3.—Some of you may have seen this patient before. She was under treatment several months since, in the Presbyterian Hospital, where I removed from the upper portion of the sternum a piece of bone. There was caries of the bone and a small sequestrum in the midst of the carious tissue. You know that sequestra do not usually form in spongy bone. It occurs, for the most part, in the compact tissue of bones, as in the flat bones and the long bones of the extremities. Spongy bones, like the vertebræ, etc., are apt to undergo caries, but you do not often find sequestra there. In this case, however, there was a mass of dead bone, which I removed. I was in hopes the wound would granulate and heal, but the healing process has been very tedious. At present you can see a considerable portion of dead bone in the midst of the spongy tissue. You occasionally see small sequestra like this in the femur, in the advanced stage of morbus coxarius. She is dressing the sore with carbolized oil put on lint. When I did the first operation for the removal of the dead portion of bone I found, on introducing the finger into the opening, that it extended back into the mediastinal space. There was some danger of matter burrowing downward and forming a sinus, but probably the previous inflammation had caused more or less adhesion of the cellular tissue, which prevented any extensive burrowing of matter. It is a situation, of course, in which you cannot very well make a counter-opening; that is, unless there is some very urgent reason for it. It would not be desirable to make an opening down into the mediastinal space unless extreme urgency of the symptoms demanded it. There is some suspicion of syphilis in this case. A great many wives are infected by their husbands without their knowledge, and while we cannot diagnose with any certainty the existence of syphilis here, it is to be suspected. Where there is caries of the bones, as in this case, but no syphilitic eruptions affecting the skin and mucous membranes can be found, we are obliged to remain in some doubt as to the diagnosis of syphilitic disease. It is always safe, however, to make moderately free use of the iodide of potassium, and very often, with advantage also, use the chloride or biniodide of mercury. In doubtful cases, while watching them carefully, it is well to give the patient the benefit of the doubt, and use the remedies which would be likely to give relief if the suspicions were well founded.

Counter-irritation.

CASE 4.—This aged gentleman has for some time been troubled with a deep-seated pain in the upper and fore part of the arm. On a previous occasion I cauterized it at a number of points, which caused so much relief that he desires the cautery reapplied at a part where there is still some pain and tenderness on pressure. The cautery which I used on this occasion is one which you see very exceptionally. It was not originated by myself, but by Dr. Thorp, who, on seeing me use a small cautery applied at several points, grouped together a number of short wires, and these, heated to a moderately red heat, enables one, instead of making six different burns, to make six burns at one time. If you heat these to a strong heat you make one large scar by burning the intervening portion of integument. But heating it moderately, a number of small scars are made, and for many purposes a cautery used in this manner is preferable to the larger cautery, which is applied by a ball- or wedge-shaped or conical instrument, as the case may be. A person with a moderate degree of firmness can bear the cautery applied in this manner without taking ether. But where the cautery is to be applied to a number of places it is rather a severe ordeal to go through with without an anæsthetic. I have had this applied to myself a number of times, and found it a most effectual means of arresting the gangrenous tendency at the seat of a furuncle. I heat this and press on it hard enough to make it go through the skin into the subcutaneous tissue. The amount of irritation following it is very moderate indeed. I think, upon the whole, I like the multiple cautery heated upon the spirit lamp very much more than the Paqueline cautery, heated by benzine. For some purposes, however, the latter is to be preferred. You should have the lamp near by, so that the cautery will not cool too greatly while being carried through the air.

Last Saturday I was consulted about a case by one of the attending physicians at the Presbyterian Hospital, the patient having a chronic inflammation over the dorsal surface of the wrist, extending some distance upon the forearm and down upon the hand. There was very great induration and pain. I suggested the use of the actual cautery, and it was applied in a number of places, carried through the skin into the cellular tissue. There has been a very marked improvement in the condition of the patient. He has suffered much less pain; there is less induration than there was, and the prognosis is much better. I think that in almost all cases of chronic inflammation about joints, especially where the inflammation is attended by a great deal of induration of the surrounding tissues, you will find much benefit from this mode of treatment.

The best means of arresting the burning sensation after the application of the heated wire is a strong solution of bicarbonate of soda. It acts like a charm. It is not necessary to apply it longer than the first day, after which an ointment of a drachm of the extract of stramonium to the ounce of vaseline may be used as a dressing. The narcotic effect of the stramonium will act advantageously in relieving the pain at the seat of the cauterization.

There are many medical men who attach no importance to the use of revulsives or counter-irritants, because they do not know how to explain the manner in which they produce their effect in relieving pain or disease. There are some minds so constituted that they will not admit a fact the reason of which they cannot explain. There are many facts, however, which we have to learn by practical experience and observation, and if we cannot go any further than to ascertain the fact that we can produce relief by a certain remedy, not being able to explain the modus operandi, there is no reason why we should not use that remedy. It is desirable we should go further if we can, and explain the modus operandi; we do know the fact, however, that revulsives, whether in the form of sinapisms, or blisters of cantharides, etc., or the actual cautery, do in many instances relieve deep-seated pain and deep-seated morbid processes other than mere pain. The establishment of an irritation upon the surface, immediately above the diseased part, will very often relieve irritations and morbid processes going on at a depth from the surface. There may be a difference of opinion as to the manner in which that effect is produced, but I think you will, in the course of your future experience, find that a very large number of cases are greatly relieved by such remedies. You take one of the simplest cases in which this class of remedies gives relief; a person has a severe pain in the bowels; apply a large mustard plaster over the surface; a burning sensation is produced, and the internal pain, in a large number of cases, is immediately relieved. Of course, if you can get at the seat of the trouble and relieve it by a more radical remedy, which aims at the cause of the pain, it is the better mode of treatment. Very often pain in the bowels, depending on imperfect digestion, for instance, is almost instantaneously relieved by the use of powdered charcoal, or powdered charcoal combined with bicarbonate of soda and some aromatic. In that case the pain is relieved by removing the cause, by neutralizing the acid with an alkali, absorbing the gases with charcoal, and modifying the sensibility of the part by the aromatic. Very often you will be able to relieve a pain of that kind permanently, avoiding the after ill effects of an anodyne, which relieves the pain by blunting sensation of the parts.

Ulcer of the Leg.

CASE 5.—This man, about forty-five years of age, has a sore upon the upper and outer part of the leg, which, however, is not apparently connected with the bone; but a number of years past I treated him for disease of the lower part of the thigh bone. He says I removed a small sequestrum of bone at that time. The seat of the disease of the thigh bone in this case is very difficult to get at, on account of the presence there of large blood vessels, namely, in the popliteal space. Sometimes, when the sinus leads directly to the seat of the disease, and the sequestrum is of limited extent, one can get hold of it without much danger to the vessels. There is one serious evil arising from a sequestrum in the popliteal space; that is, where the sequestrum is of considerable size and with a jagged extremity,

it is likely to press directly toward the great vessels. There have been several instances in which fatal hemorrhage came from opening of the popliteal artery by the jagged extremity of a sequestrum pressing against it. This patient is not prepared to undergo an operation to-day.

Case 6.—This patient has a very elongated, ulcerated surface upon the inner side of the leg, which, he says, is the result of a very free incision which was made in the Charity Hospital. I suppose, without showing what the occasion for it was, that he may have had phlegmonous erysipelas, and very free deep incisions are used in that case. It is not very common, however, to make one incision so long as this. It is more common, where there is extensive, deep-seated inflammation and suppuration, to make a number of incisions, which, in the aggregate, would perhaps be as long as this, but leaving intervening integument. This, however, is healing well, and no evil result is to be feared from it. The swelling of the leg has subsided, and all that is required now is to heal the ulcer. I think as good a dressing as he could use for it now is the liquor sodii chlorinati, diluted with eight parts of water. The leg should be raised up on a chair as much as possible.

Anchylosis of Joints.

Case 7.—This boy was brought here some time ago with a stiff elbow, the result of an injury. It was a case of false anchylosis, and by passive motion, the motion of the joint has been restored in some degree. He can lift the hand to the opposite shoulder and to the head. It can be brought to within an angle of twenty or twenty-five degrees of the right line. But there is resistance beyond that point. Now, with regard to the functions of the elbow joint, although it is desirable the patient should have the power of moving the joint in all directions to the full extent, it is very much more desirable that he should have power of full flexion than of full extension. If the elbow joint is even flexed at a right angle, or an angle a little less than a right angle, the patient has command of the most important movements which can be effected. The hand can be brought freely to the mouth and used for almost all purposes required. On the other hand, if the limb be fixed in a straight or nearly straight position, it is very much less useful to the patient. So that in the treatment of affections of the elbow joint you aim more to secure full flexion than full extension. The course to be pursued in this case is to persevere in passive motion, and also in active motion, although the patient complains of the pain thereby occasioned. He may carry a pail full of water, or a heavier weight. Raise it up and carry it, thus tending to draw the limb out into a position approaching the straight one. It is important generally, in the treatment of affections of the joints, to study, with regard to each joint, the functions of its articulation, in order that you may have a definite aim in your treatment. Of course, in all practicable cases you aim to restore all the functions of disabled or diseased joints, but there are many cases in which you will fall short of complete success in that respect. Your aim will be, if the result is likely to be imperfect, to place the limb in a position in which it will be most useful to the patient. Now, with regard to the elbow, the position is one of flexion at a right angle. Anything which you can do beyond that, toward restoring motion in every direction is all very desirable, but if you are obliged to be content with a stiff joint, let it be flexed at about a right angle. If it should be the knee joint that is affected, the position should be one that is straight; a perfectly straight position, or very nearly straight. There is a difference of opinion among surgeons, as to whether an absolutely straight position of the knee, or one very nearly straight, is to be preferred. You may say, at all events, that there is no great harm in having a very slight deviation from the straight position, not more than fifteen degrees. As far as walking on level ground is concerned, a perfectly straight knee gives the patient the best support and the greatest facility for motion; but in sitting and in going up and down stairs, a position that is a little flexed is more advantageous. It depends very much upon what the employment is, and the position in life the patient has, whether it is better to have the knee absolutely straight or deviating a little from the straight line. With regard to the other joints, you have, of course, to study the functions of each. If the shoulder is likely to be stiff, it is better to have the arm by the side of the patient than standing off at right angles; if it be the wrist, it is better to have the hand in the supine than in the prone position. In the prone position it will be much more difficult to overcome the deformity than if it be in the supine position, inasmuch as the pronator muscles are very much stronger than the supinators.

Editorial Department.

Periscope.

Tubercle of the Synovial Sheaths of Tendons.

The *Lancet* says that MM. Terrier and Verchère describe a tubercular disease of the synovial sheaths of tendons, which appears to be more common in the hand than in any other part. The tubercular nature of the affection in the cases they report is demonstrated by the microscopical characters of the inflammatory growth and the concomitance of tubercular disease of the lungs. Premising that the disease may be secondary to tubercular affection of neighboring bones and joints, they draw special attention to the form which occurs primarily in the synovial sheaths. They describe the origin of the affection as insidious, and the progress as very chronic. The first symptom is a swelling over part of a synovial sheath, as, for example, over the palmar surface of a phalanx. This swelling gradually grows and becomes softer; movement of

the part then becomes both painful and limited. Other like swellings appear over other portions of the synovial membrane, as in the palm of the hand and above the wrist. The skin becomes adherent, reddened, and ultimately ulcerates, and pus and sero-pus are discharged; the ulcer extends, its edges being irregular, thin, undermined, and livid. A probe passed to the bottom of the ulcer readily finds a narrow opening into the sheath, along which it may be passed for some distance. The tendons do not slough, nor do they become firmly adherent. The disease does not spread to the neighboring bones and joints; and although in its course more than one part of the synovial membrane is affected, these are separated by quite healthy portions of the membrane, and this fact forms one of the best diagnostic features by which it may be distinguished from fungous disease of the membrane, in which the whole extent of the sheath is always involved. In one of the two cases observed by the authors, there was a very distinct history of an injury as the exciting cause; the patient, a young woman, had cut her wrist severely; and in another case there was a history of a bruise. The constant and rapid movements of the hand are considered to account for the great frequency of the disease there. The only treatment which promises any good seems to be early free removal of the tumors; cases in which this was done with good effect, by Trélat and by Bouilly, are recorded in the paper before us, in the July number of the *Revue de Chirurgie*.

Recovery from Rabies.

The *Lancet* very wisely says:—

On more than one ground the possibility of the recovery of dogs from attacks of rabies is of great importance. The demonstration that this terrible disease is not invariably fatal, even in the animals most prone to it, may at least be welcomed as affording a ray of hope for therapeutics, while the fact of the recovery of affected animals may afford an explanation of many mysterious outbreaks of the disease. M. Decroix lately communicated to the Académie de Médecine nine cases which he had collected, of well authenticated recovery from rabies. (1) M. Ménecier inoculated two dogs and a rabbit with the saliva of a rabid dog; all three died from rabies, but the dog from which the saliva was obtained recovered. (2) Decroix inoculated a dog with the saliva of one suffering from rabies; the latter died, the former became affected with characteristic rabies and recovered. (3) Some saliva was obtained from a man some hours before he died, from hydrophobia, and with it a dog was inoculated; the animal presented well marked symptoms, but recovered. (4) Reg, of Lyons, recorded the recovery of a dog with furious rabies, due to a bite from another rabid animal. (5) A military veterinary surgeon, Laquerrière, has recorded the case of a dog affected in consequence of a bite from an animal unquestionably rabid. The destruction of the dog was ordered, but the owner refused to consent, and the dog recovered without treatment. The four remaining cases were of recovery from rabies, in man in three cases, and in the horse in the last. Decroix points out that in furious rabies the attacks increase in frequency and intensity during two or three days, then attain their maximum, and disappear in two or three days more, whereas death does not occur until the fifth or sixth day. The eminent authorities who have never met with an instance of recovery are scarcely justified in denying the occurrence of such cases described by those practitioners who have seen them. The Rabies Committee, of which M. Decroix was president, has made, since 1874, a host of experiments with various substances of reputed value in rabies, three of them with pilocarpine, and every supposed remedy which they employed appeared actually to hasten death by the violent paroxysms which it caused. The conclusions of M. Decroix are that it is experimentally demonstrated that rabies may terminate in spontaneous recovery. Up to the present day no agent has made good its claim as a remedy for rabies. The cases of recovery attributed to this or that agent may be, with equal justice, ascribed to the spontaneous termination of the disease. The dogs which recovered in the experiments carried on by the committee were left at rest, and, since the administration of medicines usually provokes convulsive seizures, it seems desirable, according to our present knowledge, to leave persons affected with hydrophobia in the most perfect possible calm, trying experiments only upon animals. In absolute quietude and obscurity the paroxysms are far less terrible than when medicines are administered, and M. Decroix asserts that if these conditions could be secured, he would far rather suffer from hydrophobia than from many other diseases. It may, however, be observed that we are scarcely justified in drawing, from the superior results of therapeutic inactivity in dogs, the same lesson in the case of the disease in man. The administration of a drug to the human sufferer by the skin or rectum, or sometimes even by the mouth, may be effected with far less disturbance than in the case of the dog. Without doubt, however, he is correct in insisting on the absolute importance of perfect tranquillity, and of the avoidance of everything which may in any degree help to excite the paroxysms. It may be doubted also whether dogs are the best subjects for therapeutic experiments, since it is probable that the conditions met with in the human subject obtain more closely in the herbivora than in the carnivora. It is very desirable, in the case of any recovery from rabies, that it should be ascertained at what date the saliva ceases to be infectious, and whether the disease can be communicated after the animal has to all appearance recovered. This is a not improbable explanation of the occasional alleged occurrence of the disease from the bite of healthy animals.

Poisonous Effects of Iodoform.

Dr. Henry E. Clark publishes an article on this subject in the Glasgow *Medical Journal*. He reaches the following conclusions: In all the recorded cases there is pyrexia, marked by extreme irregularity, the temperature running up to 104° F., or even more, and falling again very rapidly to near the normal. The rise invariably

takes place in the evening, but the morning fall is nearly always out of proportion to the evening rise. The pulse is exceedingly rapid and feeble, its rapidity being in great measure independent of the rise of temperature. Dr. Sidney Ringer has found that one-fifth of a grain of iodoform would almost arrest the action of the frog's heart. Nausea, vomiting and loss of appetite are invariable symptoms, the vomiting being persistent and very little relieved by treatment. There is always lassitude, headache and dullness of intellect, and often delirium, which in the worst cases passes into unconsciousness, or is followed by localized paralysis. The symptoms sometimes resemble those of acute meningitis, the patient uttering peculiar cries, rolling his eyes, and the headache being intense. Zeissl describes two cases in which there was an eruption on the flexor aspects of the limbs, having the appearance of erythema in the one, but in the other resembling urticaria; the eruption faded in a few days after ceasing the use of the drug. It is curious that although iodoform is so freely used in a great variety of conditions, and in patients of all ages and constitutions, it so seldom happens that constitutional effects are produced, and we are led to ask what are the circumstances which predispose to the absorption into the system, and the production of general symptoms. Mundy holds that the large quantity employed is the chief factor, and speaks of cases where from 2½ oz. to 10 oz. have been applied at one dressing; certainly, in our case, we could not blame ourselves for the reckless employment of the drug, as only five grains were applied each alternate day. Another point, however, to be noted is the condition of surface to which it is applied; thus, on a free surface, where a great deal of the iodoform is carried into or through the dressing by the discharge, the risk of absorption will be less than in a sinus with only one external opening, where the discharge is pent up and the iodoform may be retained for many days. Nor must it be forgotten that some granulating surfaces are more active than others in absorbing materials from without, healing burns being especially adapted for absorption, which may account for the number of fatalities where this drug has been employed in the treatment of burns. These considerations do not, however, account for all the cases of iodoform poisoning, nor can the plausible suggestion of a writer in the *British Medical Journal*, that the action is cumulative, and that poisonous effects are only produced after long treatment, be entertained, in view of the facts detailed as to the case under our observation. We are driven, indeed, however reluctantly, to the position held by Schede, that there is a peculiar idiosyncrasy, rendering certain persons liable to constitutional effects from the local use of iodoform, and that it is therefore necessary, in all instances where it is used, to carefully watch its effects, and cease its use whenever there is a distinct rise of temperature.

—It is stated that no appointment will be made to the chair of Animal Morphology in the University of Cambridge, rendered vacant by the death of Mr. F. M. Balfour.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We welcome an addition to the scientific journals of Philadelphia, in a new venture, "*The Druggists' Journal*, a Monthly Publication of Materia Medica, Chemistry, Botany and Microscopy," published by George A. Frey & Co., 123 S. Third street, and edited by L. E. Sayre, Ph. G. Mr. Sayre is already known, to both medical and pharmaceutical readers, as the author of an excellent treatise on "Organic Materia Medica," and is moreover thoroughly versed in the practical details of his profession. The number before us contains 16 large 8vo pages of reading matter, original and selected, all of solid character. The aim of the "*Druggists' Journal*" will be to publish articles of practical value, to expose impracticable and effete formulas, to aid the student in laboratory work, and to discuss all important questions relating to the policy of the drug trade. The subscription price is $1.50 per year, and we feel confident that no druggist or doctor will waste his money if he remits for it.

——In a pamphlet entitled "An Old System and a new Science," Dr. F. E. Stewart sets forth the reason why, in his opinion, a physician should not prescribe proprietary pharmaceuticals, and also explains the system of "working bulletins," which he believes to be the shortest and most effective plan of getting at the value of a new remedy. Those who would like to read his arguments can obtain the pamphlet gratis by addressing the publisher, Mr. George S. Davis, P. O. Box 641, Detroit, Mich.

——Dr. C. Henri Leonard sends us a copy of his "Multum in Parvo Reference and Dose Book," as edited to date. The price is 30 cents, and it may be had of the author, Detroit, Mich.

——The value of electrolysis in the treatment of stricture of the urethra, seems to be amply demonstrated by the facts set forth in a pamphlet on the subject, by Dr. Robert Newman, of New York. Among hundreds of cases which he has treated he did not have occasion to resort to any other method, and what is more, the results were permanently satisfactory. Copies may be had of the author, 68 West 35th street, New York City.

—The Minister of Public Education, of Russia, has found that the experiment of giving elementary instruction in medicine at the municipal schools of St. Petersburg has been so successful that he has authorized its extension to all the municipal schools throughout the empire.

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VACCINATION AND ITS RESULTS.

From time to time the opposition to vaccination which is always prevalent in the uneducated and superstitious masses, crops out in the more educated, and even in the profession itself. We would not attribute this to deliberate perversity or desire for notoriety. There are minds so constituted that they will adopt an opinion without examination, and then labor earnestly to prove its correctness. Others, again, are impressed by one or two isolated facts, and can only see other facts which give one interpretation to these. Such minds are color-blind as to statistics and high-gravel blind as to logic.

The opponents of vaccination are treated to an excellent article, in *The American*, Sept. 2, from the pen of Dr. HENRY HARTSHORNE, but one the excellence of which they will unwillingly appreciate. He reviews, in a masterly manner, the late anti-vaccination writings of Dr. CHARLES T. PEARCE, P. A. TAYLOR, HENRY BERGH and others, setting forth in a perfectly clear style the unfairness with which they handle statistics, and the baselessness of many of their confident statements.

The results of vaccination are, indeed, so sunclear that it is really a psychological puzzle to understand how any person who studies them can harbor an honest doubt as to the benefit of the practice. Dr. HARTSHORNE puts them in a nutshell, in the following comparison of deaths nowadays and in the last century:—

Look at the later statistics of the United States, obtained by our National Board of Health in 1881. Sixty six cities and towns in this country yielded, during that year, in all, 4000 deaths from smallpox. As crowded cities always furnish much the largest number of cases of such diseases, it is not probable that more than a thousand deaths (representing from five to ten thousand cases) occurred outside of the reported cities. Suppose, then, five thousand deaths in more than fifty millions of people. This is one hundred deaths to each million of population. For fear, however, that we have under-estimated the deaths in rural localities, let us add to it, double or treble it—make it, say, *three hundred* to the million living. But, as Dr. Fothergill and Sir Gilbert Blane calculated, upon good evidence, the death-rate from smallpox in Great Britain for thirty years before vaccination was introduced by Jenner, was *three thousand* in every million of the population. Well may it be conceded that the mortality (besides the often hideous disfigurements, blindness and deafness resulting) of smallpox has been lessened since the day of Jenner. Put, again, alongside of the above statements, the almost total absence of smallpox from such a country as Ireland, in some recent years (1866, 1867, 1868, 1869), and the official record in the report of the Massachusetts Board of Health, just issued, of the occurrence of but *two deaths* from smallpox in so large a city as Boston, in eight years—1873 to 1881.

It would take a physician with a singularly elastic conscience to say anything against vaccination after reading the above passage. He must be strangely unaware of the responsibility he incurs, if, in the face of these facts, he throws the weight of his influence against this safeguard.

Indeed, the profession, as such, ought to insist on compulsory vaccination and revaccination every decade of life. The danger has been shown to be null, the protection positive. The duty that, in society, every individual owes to his neighbor is serious enough to justify the State in demanding that he shall submit to this operation as often as the best authorities on the subject pronounce it necessary. As in other matters, if people will not submit to reason, and by

their refusal endanger others, the strong arm of force should be laid upon them.

Personal prejudices are not personal rights, and may be indulged only when they do not compromise the safety of others. Hence we are earnestly in favor of a positive enforcement of vaccination by legal statute in every State in the Union.

THE THREATENED CHOLERA EPIDEMIC.

There has been an uneasy feeling in the United States this summer, that we are on the verge of some serious epidemic. The lateness of the season justifies us now in dismissing these fears, but only for the time being.

In several localities cases with all the symptoms of Asiatic cholera have been reported. One of these, quite lately, was in Michigan, another at Newport, R. I., and they made considerable stir. It is very true that Asiatic cholera is raging with great severity at Manilla; it has been recently at Aden, on the Red Sea; and isolated or sporadic cases are reported at many other places, including those in our own country. It is not unusual here, however, to find severe cases of "cholera morbus" reported as Asiatic cholera, and this may be so in the case of the little boy who died at Newport. If there is anything in the seeming periodicity of Asiatic cholera, it is not due in the vicinity of Philadelphia prior to 1883. The well marked epidemics of that disease in this city, beginning with the memorable infliction of 1832, have been at intervals of about seventeen years—as thus, 1832, 1849, 1866. This seeming periodicity, of course, may be mere accident; but if there is anything in it, 1882 is not a cholera year, while 1883 may well be one.

It behooves the authorities, therefore, to be on their guard, and early next summer to take efficient precautions to prevent the pestilence landing on our shores. This is easier than fighting it after it is here.

In spite of every effort, no satisfactory treatment of cholera has yet been discovered. Its fatality is about the same as ever, and that is very high, especially in the earlier weeks of its outbreak.

Preventive measures, on the other hand, have yielded excellent results. Quarantine and sanitation judiciously, and firmly enforced, have controlled its march with a pleasing certainty. But no tampering with hypothetical objections to them is safe. Isolation, segregation and cleanliness are what are demanded.

The periodicity of epidemics is an established fact, the causes of which were ably set forth by Dr. DeCandolle, of Geneva, in a monograph on the subject, published some years ago. We are not, however, yet in a position to predict their return at given epochs. The vital statistics of the world are far too limited to permit this; but each year yields new facts confirmatory of the theory. Therefore, let us be on the alert for the possibilities of 1883.

CONTRIBUTION TO OUR KNOWELDGE OF THE PERIPHERAL TEMPERATURE OF THE HUMAN BODY.

In his thesis for graduation at the University of Tübingen, Dr. A. Römer has reported at length certain thermometrical observations on the temperature of the human body, made on himself. Of this careful work we find, in the *Centrlbl. f. d. Med. Wissensch*, 1882, No. 46, the following extract, made by Prof. Senator:—

Römer, while living as regularly as possible, first made some observations while holding the instrument in his hand. He found, during the course of the day, far greater variations in the hollow of the hand than in the rectum, where the temperature was taken at the same time. In the former, these variations reached 6.10° C.; in the latter, 1.21° C., only. Notwithstanding outside conditions were the same, sometimes within twenty minutes the temperature in the hollow of the hand varied more than 2°, yes, even 3°; while at other times it continued nearly the same. A carefully kept record resulted in the interesting fact, that there exist certain variations at certain times during the day, but on some days the maxima and minima appeared somewhat earlier and were not quite so great.

The course of the daily curve was found to be about as follows: After the temperature has been comparatively high during the night, in the morning, at 6 o'clock, a rapid fall takes place, reaching its minimum between 9 and 10 o'clock; then a gradual increase takes place, reaching its maximum soon after dinner; between 1 and 3 o'clock, again, a rapid fall ensues, so that from two to three hours later another minimum is reached. Between 6 and 8 o'clock the temperature begins again rapidly to ascend, and only toward morning somewhat slowly declines again. This daily curve of the external temperature is in opposition to the rectal temperature, when compared with the daily medium. The latter shows, from the morning at 8 o'clock, till the evening at 9 o'clock, a higher temperature, but during all the other time of the twenty-four hours a lower one than the medium, while, with a few exceptions, the surface temperature records the opposite. *A rapid fall on the surface corresponds to a rapid increase in the interior, and vice versa*, only during the transitions apparently an exception takes place, and the variations in the hollow of the hand appear about two hours earlier than those in the rectum, and happen once in the day oftener.

Other variations noted, and which have formerly been observed already, are the following: The lifting of the arm causes a slight fall, the dropping of the arm a slight increase of the temperature in the hollow of the hand; impeding the venous or arterial circulation produces a rapid decrease; the same also rapid and severe cooling of even distant parts, as the legs. Digestion seems to have an influence after dinner only, but here a considerable one.

Certainly these variations are caused by the regulation of the heat of the body, according to which an increase of temperature in the interior must, in the healthy body, be compensated immediately by variation of heat on the surface. But this compensation is disturbed in disease; so that the thermometrical record in disease is hardly affected by these observations; but the latter teach us not to consider always even considerable variations as a sure indication of disease; and it may be well to always take, in important cases, the temperature of the rectum, and to make a new number of observations of the human rectal temperature at night, to find out the value of the statement, that even in the earliest prodromic stages of tubercular phthisis the thermometer (on the surface?) shows an increase of at least one degree. If this should be found in the rectum also, and only in such cases, the fact would be of value; but if on the periphery only, then such persons would share this nightly increase of temperature with all healthy human beings.

We further learn from this, with what cautions any so-called diagnostic or pathognomonic sign should be received, and that such sometimes find a totally different explanation, because central experiments were wanting.

CRANIOLOGY OF MURDERERS.

That there is some truth in craniology can alone be seen from the fact that the skulls of the different races are widely different from each other. Drs. Heger and Dallemayne, in Brussels, have now examined the skulls of a large number of murderers, and published the result of their investigations in detail, in the *Annal. de l' Université de Bruxelles*, 1881, p. 1.

It is impossible for us to mention all the numbers of their measurements, and we must be satisfied with giving our readers a few of the more important results of these investigations. They found that most of the murderers have the posterior part of their skulls (and also of their brains) in comparison, more strongly developed than the front part (but without atrophy of the same), that the brain, as a whole, is generally large, and that, therefore, with them, "the intelligence is not strong enough to withstand their strong impulses." Murderers do not form a special, separate class, but they all possess in their brains and skulls an "inequality born with them." Of all the skulls of such individuals, *i. e.*, quasi-professional murderers, who combined with the murder burglary and robbery, or rather, the latter accidentally with the first, this same want of equal development of skull and brain was noted, and in two who had committed more than one such crime, this remarkable unequal development was espe-

cially apparent. Such men with better education, and their animal impulses guided in a different direction, might have become heroes. Violent impulses, if correctly applied, may lead to great deeds, if not to great crimes. We were present at the dissection of Anton Probst, the murderer of the Deering family, and remember to have noted the same large brain and the same preponderance of the posterior part of it.

Notes and Comments.

Hypodermic Injection of Iodoform in Syphilis.

Dr. Ed. Thomann, in Graz, has made a number of experiments to detect the value of hypodermic injections in syphilis, and gives a preliminary statement of the results gained, so far, in an article published in No. 44, 1881, of the *Centrlbl. f. d. Med. Wissenschaften.*

He made use of a solution of 20 parts glycerine and six parts iodoform. He began with 0.30 iodoform and the dose increased to 0.75. He employed also a solution of 0.30 iodoform in 6 ctm. sweet almond oil. He took cases in whom, with decided induration, the inguinal gland had also commenced to enlarge greatly. After he had made ten to twelve injections on different parts of the body, he observed, in all his cases, a gradual disappearance of all signs. He found the experiments of Binz and Högyes confirmed. They had made theirs on animals. The injections produced almost no pain, or very little only, and the local symptoms were very moderate and by no means as severe as those following injections of corrosive sublimate. None of his patients complained of these hypodermic injections of iodoform.

Within two hours the remedy could be demonstrated in the urine. No disturbance of the general health, no increase of temperature or of rapidity of pulse followed, and the breath did not have the odor of iodoform.

The results are undoubtedly such, that they encourage further experiments. The observations were made in the clinic of Prof. Lipp. Should they prove lasting and uniform, we would possess at last a remedy by which we might be able to prevent the poisoning of the system by lues, and the method would be indicated as soon as the slightest induration of an inguinal gland should denote the beginning absorption of the syphilitic material.

A Cerebral Centrum for the Color Sense.

Since it has been found out that many persons are what is now called color blind, the question has been raised, by Dr. J. Samelsohn, in Cologne, if there does not exist a special centre, somewhere in the brain, for the color-sense. In a short, but very well written article in the *Centrlbl. f. d. Med. Wissensch.*, 1882, p. 851, Dr. Samelsohn says, very correctly, that the question might be changed to the following: If there are cases of double-sided hemianopia, in whom the sense for space and light is perfectly intact, while on the respective half-fields of vision the color sense is totally extinguished, Steffen (in *v. Graefe's Arch.* xxvii, 2, p. 6,) has found such a case, and remarks: should there exist one similar case—only one solitary one, but one undoubtedly of the same kind—we would have a clear proof that in the main central organ, the brain, the centre for the sense of space and for the sense of color are divided, no matter how near to each other they may be situated, but there is a special centrum for each of these senses.

Samelsohn now had such a case under his charge, exactly like the one published by Steffen, where, in consequence of an apoplectic seizure, the sense of space and light was perfectly intact, but where the color sense was utterly extinguished. He would have published this case sooner, and mentioned it before Steffen's article appeared, in a meeting of his local medical society, but he hoped to be able to give the result of the post-mortem examination; but under the administration of iodide of potash and electricity absorption was established, all the symptoms disappeared, and then a second seizure—due to an enormous effusion—brought about rapidly the fatal end, leaving the brain in a condition where any attempt at finding this centre, under the complicated morbid process, was utterly out of the question. But the fact has now clinically been established, that there exists somewhere in the brain, a special centrum for the color sense.

Nephrectomy for Strumous Disease of Kidneys.

The following case, recorded in the *British Medical Journal*, by Dr. Thomas Cole, illustrates how inaccurate may oftentimes prove the most painstaking diagnosis: A boy of eighteen was admitted into the hospital with the following symptoms: Micturition necessary every two or three hours by day, less often at night, and pain at end of penis after conclusion of act. Urine below normal density, and contains abundant albumen, blood and pus, but no casts nor crystals.

No renal tumor perceptible. The diagnosis was scrofulous pyelitis. Rest, good food and tonics materially improved his condition. He subsequently became worse, and a slight enlargement of the right kidney could be detected. Growing rapidly worse, it was decided to perform nephrectomy, but on the day before that set for the operation he became much worse and died. At the post-mortem, the right kidney, which was supposed to be the seat of disease, was found only slightly enlarged, containing numerous abscesses but no inflammation of pelvis, while the left kidney (which, in the event of operation, would have been relied on to perform the work of two), consisted only of dilated calices, and had almost disappeared, weighing only one ounce and a half, and measuring two and a half inches in length and one in breadth. It was surrounded by an abscess, which extended down beneath the psoas fascia to Poupart's ligament. Had the operation been performed, it would have been necessarily immediately fatal.

Cystosarcoma Phyllodes.

Dr. C. Friedlænder remarks, in No. 46, 1882, of the *Centralbl. f. d. Med. Wissensch.*, that the cystosarcoma mammæ was first described by Joh. Müller, who mentioned as its special characteristics, that it consisted of papillary excrescences, which could easily be lifted out. Friedlænder then cites a case reported by H. Chiari, in the *Wien. Med. Jahrb.*, 1881, p. 1. A tumor of the size of a walnut was extirpated from the parotid, in several pieces; it had been growing for two years. The pieces were dense, and consisted of a hard, sinew-like tissue on one side, and of a gland-like structure, with fine linear spaces, on the other. Out of these spaces the same papillary excrescences could be lifted, as above mentioned. After a microscopical examination Chiari pronounced the tumor to be an adenomyxoma. Three weeks after the operation the patient died, of erysipelas. At the post-mortem several metastatic nodules, up to the size of a walnut, were found in the lungs. They presented, under the microscope, the same histological structure as the tumor of the parotid.

Curare in Epilepsy.

Dr. Kunze highly recommends this powerful substance in the treatment of epilepsy (*Journ. de Therap.*). He obtained nine perfect cures in thirty-five cases. The facts reported by him prove that even at advanced stages of the disease, when the intelligence is somewhat affected, complete cure is sometimes obtained and partial return of the intellectual faculties ensues.

Edelfren, encouraged by these observations, has given curare in confirmed cases, for the bromides, associated or not with atropia, are not always successful. He adopts the following prescription of Kunze:—

℞.	Curare,	grs. viiss	
	Aquæ destill.,	ʒj–ɱxx	
	Ac. muriatic.,	gtt. j.	M.

He injects, once every five days, about ten minims of this solution. In his hands the hypodermic injection has never been followed by inflammation or any toxic symptoms.

Locomotor Ataxy, of Syphilitic Origin.

When M. Vulpian asserted that almost one-half (40 per cent.) of the cases of locomotor ataxy were of syphilitic origin the proportion was considered to be much exaggerated; but since that period the researches and observations of M. Fournier have demonstrated that M. Vulpian's affirmation was correct, and that the proportion given was rather under than above the actual number of cases. According to M. Fournier, in almost all cases syphilis has a part in the production of locomotor ataxy, and he gives the following rules regarding the management of the case: 1st. Always seek for any manifestations of syphilis in cases of locomotor ataxy. 2d. If such exist institute immediately prolonged and severe anti-syphilitic treatment. 3d. Syphilis should be energetically treated from the début, so as to prevent the occurrence of such serious accidents later on.

Iodoform in Tuberculous Pharyngitis.

At a recent meeting of the Soc. Médic. des Hôpitaux, M. Gouguenheim related the facts of a case of tuberculous ulceration of the pharnyx cured by applications of iodoform. The different forms of tuberculous angina, well described by M. Isambert, were considered by him as fatal. In M. Gouguenheim's observations, applications of iodoform very rapidly induced cures of the ulcerations; it is true they recurred twice, but at present they seem to have definitively disappeared. M. Gouguenheim employs a solution of iodoform in ether, but insufflations of the powdered drug may be directly used on the ulcerations. He concludes, from his observations, that iodoform is a powerful modifying agent when applied to tuberculous ulcerations.

Iron in the Urine.

It is well known that muriatic acid, when added to urine, causes a dark brown-colored uric acid to be set free. Dr. Kunkel (*Würzburger Phys. Med. Ges.*, 1881, *A.*) has detected that the coloring matter contains iron. But not all the iron is removed in this manner out of the urine, even not if urate of sodium and acid are added repeatedly.

Kunkel was able, also, to get out of melanotic tumors a black coloring matter containing iron. He extracted the finely powdered substance and precipitated the solution with muriatic acid. Salkowski supposes that the iron was connected with impure albumen.

A Gall Bladder of Enormous Size.

The following interesting and perhaps unique case is described by Dr. B. Stiller in the *Pester Med.-Chirurg. Presse*, 1882, No. 38 :—

A woman, aged 64, presented a tumor which, beginning at the right axillary line and extending diagonally toward the middle line of the abdomen, reached as far down almost as the symphisis pubis. This immense swelling was found to be an enlargement of the gall bladder. Stiller detected, at the post-mortem examination, that on the lower surface of the liver a carcinoma had grown, which compressed the ductus choledochus, causing this undoubtedly unique enlargement.

News and Miscellany.

British Medical Association—Meetings of Sections.

SECTION OF PUBLIC MEDICINE.

The address in this Section was delivered by Dr. Alfred Carpenter. He contended that a large portion of the rapid growth of the British Medical Association has come to pass because its foundation was intimately associated with inquiry into the causation and prevention of disease, and the application of the principles which regulate the health of the general public. When our founder put forth his programme there was no general Association for the furtherance of these objects, which, to my mind, have revolutionized the system of medicine. The prospectus which he published in 1832, put forth, as a *raison d'etre*, "The investigation of the modifications of endemic and epidemic diseases in different situations, so as to trace their connection with peculiarities of soil and climate, or with localities, habits and occupations of the people." I claim the object which is stated in this paragraph, in his prospectus, as the principal lever by which the success of his movement has been achieved. The whole of the five points contained in his syllabus could only be obtained by a combination of persons, and the mutual support which observers over large areas could afford ; but not one equaled in importance that which is now known as the science of preventive medicine, and which is contained in two of the five points advocated by Sir Charles Hastings. We may, therefore, fairly assume that the benefits which the British Medical Association has been instrumental in producing have been enormously enhanced by this part of our founder's programme ; and that, of the five points of his syllabus, those connected with preventive medicine held, and will continue to hold, the most important place, because they are bonds which are most capable of uniting us together in a general brotherhood for one common beneficial and unselfish object, while they unite us most directly with the public at large, for it is the only Section to which, at its meetings, the outside public are admitted.

I propose, with your permission, to review very shortly the sanitary work which has been directly performed by the Association.

In the first volume of *Transactions* there are some valuable observations upon the objects and modes of medical investigation, by Dr. Barlow, of Bath, and with it is a proposal by Dr. J. Conolly, of Warwick, to establish County Natural History Societies, for ascertaining in all localities what states are productive of disease or conducive to health ; thus connecting our own particular work with the objects and transactions of the Association. There is also a valuable report upon the state of disease in the city of Worcester during the year 1832, by Dr. R. N. Streeten, of this city.

The second volume contains papers upon the "Variations in the production of certain diseases not usually supposed subject to epidemic influence," and upon cholera. In the third volume are observations upon cholera as it occurred in Bristol.

In the fifth volume aopears an article on "Glanders in the Human Subject," by Dr. James Johnston. The writer does not allege that he was the first to draw attention to the subject, for he refers to cases published by Mr. Travers, Dr. Elliotson, Mr. Massey of Nottingham, and others on the continent, but he says that the materials at hand were scanty. He connects the cases with farcy, and points out its likeness to gonorrhœa and syphilis, and draws attention to the effect upon human beings of matter from animals, which at that time was supposed to be unlikely to happen, the opinion of most physiologists being that there was an absolute barrier between the two classes of creatures, notwithstanding the evidence afforded by Ceely's observations. It was a good work, associating disease in man with its factor in the animal kingdom, so as to bring that connection forcibly to our notice, and to popularize the idea in the minds of the profession. It has helped to bring forth important fruit. The same volume contains a masterly report upon the then condition of medical relief for sick paupers, by the Messrs. Rumsey and Robert Ceely, which, with a paper by Dr. J. Yellowley, addressed to Lord John Russell, was greatly instrumental in drawing attention to the terrible evils under which at that time the poor of the land were placed by the local authorities,

and to the serfdom under which medical men labored. who were appointed to attend upon the poor. This serfdom could not, but for our Association, have been fully exposed to public view. In those days, there were no local newspapers to ventilate the grievances of the oppressed local doctor. The medical press had a very limited influence, and was seldom read by others than a small body of medical men, who were without any kind of political power; for which reason, time serving politicians scarcely cared to trouble themselves with us and our complaints.

In the sixth volume is a report upon "Influenza or Epidemic Catarrh," which appeared so mysteriously in the winter of 1836-7, and, but for the Association, would have left very little record of its infliction. The Council issued a circular to the members, requesting information as to the origin, progress and duration of the epidemic; the atmospheric phenomena preceding and attending it. A most elaborate report occupying sixty-seven pages of the sixth volume, was drawn up on these answers. A chart with dotted and shaded lines shows the apparent alliance between the fall of temperature and the rise of influenza: but the supposed influences are shown to be checked, by evidence obtained from many parts of the country; they did not stand in the relation of cause and effect, for the conditions were present in some places, but were not accompanied by the influenza. The consideration of the condition of the public health occupied an important position in the proceedings, for the following resolutions were adopted at the annual meeting at Cheltenham, in 1837:—

1. That it appears desirable to this meeting that the members of the Association, in their several localities, should urge upon the members of legislature the importance of an enlightened consideration of the question touching public health, now pending in Parliament.

2. That the meeting suggests to the members generally the propriety of lending their aid to carry into effect the Act which has recently passed the legislature, to produce an improved registration of births, deaths, and fatal disease.

3. That, as the Association feels persuaded that an extensive series of observations, made in the various sanitary institutions of the kingdom, would contribute especially to the progress of medical science, a committee be appointed to draw up tabular forms for statistical records of disease.

The address on "Medicine," before the Association, read by Dr. Malden, in 1838, dealt largely with the questions of causation and prevention, and a large portion of the *Transactions* of this year is devoted to Medical Topography. The meeting held in Liverpool, in 1839, is noted for the attention given to hygiene. The president dwelt very forcibly upon public health, remarking, "We have to consider various and important subjects; one of them is that of hygiene, a study in this country, comparatively overlooked; surely it must be considered no small part of the duty of a medical man to preserve health, as well as to combat disease, and this can only be done by vigilantly observing and making known local circumstances which lead to it.

A Public Medicine Section was first organized at the Oxford meeting, in 1868, and has been regularly instituted since that date. In 1875 I had the distinguished honor of reading an address upon Public Medicine, a position which that subject occupied for the first time at the Sheffield meeting.

The impetus given to original research by the Scientific Grants Committee, the foundation of the Hastings medal, the registration of disease, as suggested by my distinguished predecessor in this chair, Dr. Ransome, and especially the establishment of examinations in subjects relating to public health at our Universities, have tended to help forward the good work. The latter is especially due to the enlightened men who have acted as your guides upon the Committee of Council, assisted by those who have been placed at the head of the staff of the *British Medical Journal*. The position that sanitary science and preventive medicine now occupies in the estimation of the public is due, in a great measure, to the steps which Sir Charles Hastings took when he founded the Association, fifty years ago; and in his honor, as well as for the public good, I ask you to assist to render it all that can be desired that it should become. Time would fail me to refer to all the works connected with our subject; but with an able editor of our journal, especially devoted to hygiene, and who lets no opportunity slip of promoting those objects which especially belong to our branch of the Association work, there must be a great future in store for us; and the revolution in medicine which a study of prevention is likely to effect may be nearer than most of us suppose to be the case. Our successors in this work, who will occupy our places fifty years hence, will then, perhaps, be able to give a tribute to our memory, not on a par with that which we wish to bestow upon our founders, but one which will tell to future generations that we have not been false to the trust which we have undertaken to perform.

SECTION OF OPHTHALMOLOGY.

The address in this Section was delivered by Dr. James Vose Solomon. Contributions to Ophthalmology used to constitute a part of the proceedings of the Section of Surgery, and it was not until 1880 that a separate section was created. In June of that year the Ophthalmological Society of the United Kingdom was founded. At the recent International Medical Congress it was stated by Dr. Horner that he had reduced, by the employment of antiseptics, his cases of suppuration after the operation for cataract, to a fraction over one per cent. as compared with six per cent. I assume that to have obtained such satisfactory results special care must have been taken to exclude patients suffering from diabetes, renal degenerative changes, or advanced atheroma. When we have doubts of the patient's reparative powers to heal the incision by primary union, Dessmarre's operation of sub-conjunctival extraction, with the modern improvements as to length of corneal incision and treatment of the iris, is well worthy of adoption. In a case of diabetic cataract I have lately had recourse to reclination, and obtained a good result as to vision. The steps of the operation are facilitated and obtain greater precision by the employment of two

needles; one being passed through the cornea, in order to press the lens back to a sufficient distance from the iris to allow of the scleral instrument being brought in front of the lens without entanglement in its capsule or the iritic structure. At the Birmingham Eye Hospital the extractions are dressed with pads of absorbent cotton-wool, medicated by boracic acid. Suppuration of the flap after a cataract operation has been sometimes traced to dietetic poverty.

There is an exceedingly rare complication of hard cataract which deserves notice, and in which extraction affords success. We have no indication of its presence until we are in the act of making our flap, when we are surprised to find that the aqueous humor continues to flow, in freedom and quantity quite unusual, and also that the sclera presents wrinkles before the section is finished, and when completed we have before us a collapsed bag, the cataract lying far back. I have operated in two cases, one of whom was a female dwarf, the other, a male fifty-four years of age; recovery took place without a bad symptom, and the vision was good for the reading and correspondence required in a large business.

Of late, the subjects of intra-ocular tension and glaucoma have excited renewed attention in respect to the changes of position and structure of some of the parts that are concerned in effecting the normal filtration of the intra-ocular fluids, and especially to the surgical methods best adapted for the relief of various phases of the glaucomatous process. A new operation will be described to us by Dr. Grossman.

It is just twenty years ago since I combated the then prevalent dictum that all cases of excess of tension necessitated an iridectomy, and declared that my experience justified me in asserting that the recurrence of tension after an iridectomy performed for the relief of chronic or subacute glaucoma "may generally be completely overcome without resorting to a second or third iridectomy, as advised by Von Gräfe.

There are some other subjects to be brought before us, which, were it not that the present epoch has been endowed with the immortal discovery of the ophthalmoscope by Helmholtz, would have been impossible of elucidation. Mr. Nettleship will open a discussion on the question, To what extent do the signs derived from the examination of the eye and its appendages contribute to the localization of central nervous diseases? Dr. Gowers and other eminent brethren are expected to take part in the discussion. The application of the ophthalmoscope to the diagnosis and treatment of errors of refraction will be treated in a paper by Mr. Juler. Mr. Priestly Smith has a new perimeter to show, and, for discussion, a curiously interesting medical case.

Gentlemen, I have detained you too long, and wearied you, I fear. Let me assure you that I would gladly have spared you these pains had not that obdurate and cruel tyrant, precedent, dominated and enslaved me. I have, I confess, not altogether unwittingly followed it; for the position I now occupy, by the favor of my brethren, only falls once in a lifetime to the lot of any of us. I am old enough, as many of us are—so rapid has been the advance—to remember ophthalmic surgery as taught by Lawrence, Tyrrel, Mackenzie and Guthrie. How obscure did they leave much of the *rationale* of many eye diseases; how helpless and imperfect much of their treatment! Minute anatomy, physics, and applied mathematics have changed all that. We can now retort to those who sneer at the varieties of medicine by pointing to our little domain, the privileged home of an almost exact science. That it is so, the labors of this Section will, I feel certain, help to prove; and to that demonstration, gentlemen, I cordially invite you.

SECTION OF OTOLOGY.

The address was delivered by Dr. W. Lairdlaw Purves, who said that, as far as known methods of examination go, we have embraced every one which can assist us in the determination of structural change. The auricle, the meatus, the membrana tympani, the tympanic cavity to a certain extent, with the naso pharyngeal cavity and the Eustachian tube, are all under observation as exact as any part of the body. By the use of mirrors, of microscopes, and of specula, we have within the last few years been able to determine changes of the structure, of the position, and of the mobility of those organs which were before a sealed book. By the use of auscultation, bougies, and currents, we determine the existence of extravasations, the patency of tubes, the alterations in equilibrium. But beyond these the actual demonstration of the integrity or impairment of structure has not arrived.

For the purpose of exactly determining abnormal changes of function, it is necessary that we should have some standards of the normal power. In this respect we are deficient. The determinations at which we should strive to arrive may be classed as those which ascertain. We require tables giving us the results of determinations of acuteness of hearing at certain ages, for fluctuating conditions of atmosphere, for different dimensions of rooms in which the observations are made, for conditions of the body at the time, as to general, muscular, nervous or circulatory states, apart from localized aural conditions. We have not any satisfactory instrument for judging the power of the voice, which would give us the best and most useful of all tests. Nor have we a ready plan of ascertaining the exact amplitude of fork vibrations to which the nerve does not respond. The determination of the field of audition claims attention. The range of audition, *i. e.*, the range of vibrating pitch determinable by the patient under the same conditions. This sense corresponds to color perception, and if its further study will give us results corresponding to those obtained by the abnormalities of color perception in various general nervous affections, it would add to the exactitude of the diagnosis of those obscure diseases.

The power of judging the direction of sounds is, perhaps, not one of much importance in a civilized state, but it is a subject of interest and worthy of research.

For practical purposes, the recognition of timbre and the duration of impression do not call so much on our attention as the accommodation of the ear. This has, as yet, as far as I know,

baffled determination, and yet it is one of the most common complaints of weakness and age. When arising from a general condition, such as anæmia or diphtheria, we have a clue as to its extent by determining the loss of accommodation from which the sister organ suffers; but, in cases of local change, apart from general loss, I know of no standard.

These embrace the principal tests which should be made in the healthy, from which we could make deductions as to functional changes. We have a mass of information upon some of these points, while on others our knowledge is meagre. Some of these examinations may seem superfluous, and lead us at present to no apparent practical profit to those claiming our aid. Let us remember how seemingly disjointed fragments of physical science, collected by workers with different aims, every now and again receive, by one fresh ray of light being thrown on the whole, a new and general connection and bearing to each other, verifying the belief that all observations of an exact kind will certainly be turned to account some day, and often when least expected.

Are our therapeutical means in a more satisfactory state than our methods of diagnosis? As far as operative interference goes, they will, I believe, compare favorably with any branch of surgery. The results of manipulative interference on the membranes, the throat, the tubes, the cavities, are often marvelous. When we call to mind the benefits derived from restoring tension, removing obstructions, dilating tubes, renewing equilibrium, altering the position of pressure, or varying the calibre of the resonator, we may rest assured that the knowledge and proper application of these operations will give succor to those in need, and satisfaction to ourselves.

There is one agency which ought, I think, to be more carefully cultivated than it is at present, and that is, electricity. Seemingly of no benefit in the majority of cases in which it has been used by me as a therapeutical power, cases now and again arise in which the benefit rendered has been great. With such cases before us we should not despair of being able shortly to diagnose the cases in which it is of service, and prescribe it with gratifying effect.

Failing in curative means, we turn to artificial aids, to the conduction, collection, or magnifying of the motions perceptible by the ear. The name and form of these is legion, and yet they come. The utility of what we have hitherto employed has been great, but I have no hesitation in saying that the application of the discoveries of the last few years will shortly develop aids to the deaf which will far outshine the advantages hitherto afforded by those in common use. Remembering that, even with the absolute destruction of the external and middle ears as a functional apparatus, we have other highways by which we can arouse the acoustic nerve to sonorous vibrations, and recollecting that we have now methods of magnifying these, of collecting them, of producing different tensions, and of vibrating membranes, as shown by microphones, resonators, and telephones, I trust the day is not far distant in which a healthy acoustic, and even a somewhat degenerated one, can be supplied with apparatus which will make it almost independent of the natural conducting apparatus of the ear. Nor do my hopes flag here. To that being who claims our pity beyond even those who seek our aid, who has but one avenue to the soul unclosed, the loss of which would cause a moral death, to the deaf-mute, I believe there is hope. Seeing the strides which our knowledge of vibrations is making daily, and the astounding results obtained thereby, I see every reason to hope that some method of amplifying and rendering such vibrations visible to the eye may be devised, which may render his intercourse with his fellow-beings easy and profitable.

Looking, then, around at what has been achieved in our specialty, and taking that as an earnest of the advantages which we are able to dispense to suffering humanity, I invite you to the discussion of the subjects prescribed by the Executive Committee: trusting, by the collection and comparison of the experiences of members, to forward each other in assisting to place the distressed, not only in a condition free from physical torment, but in a position by which intellectual culture and recreation can only be attained.

SECTION OF PATHOLOGY.

The address in this Section was delivered by Dr. J. Hughlings Jackson, who commenced by stating that "Pathology is the basis of every rational system of therapeutics." To those who are quietly and laboriously working at what may, superficially looked on, seem to be obscure pathological problems, steady advances in diagnosis and rational therapeutics will be chiefly owing. It is evident that, for rational therapeutics, we must know what there is to be treated. No man in our profession deserves greater credit than the pathologist—including, of course, the clinical pathologist, and never forgetting the medical officer of health. The medical officer of health is the pathologist of the social organism, and deserves the highest social recognition. Speaking more narrowly, tacitly assuming the obvious qualifications, the best practitioner, perhaps not the most confident one, is he who has carefully made most post-mortem examinations. I do not mean him who stops here, who stops in a stage which is rather to be called one of morbid anatomy than of pathology. But a man must begin here; must begin here to learn for himself, at any rate. The only way of being thoroughly practical is to face the facts, to get verification or disproof of our opinions. A post-mortem examination never flatters us. If, for an example, we diagnose tumor of the cerebellum during the life of a patient, we may, post-mortem, find one in the anterior cerebral lobe. Such a rap on the knuckles is good for us. It makes us less confident, and teaches us to be more careful. A post-mortem examination may tell us that we have been treating a patient with useless, perhaps with injurious, drugs.

Besides scientific pathology there is a crude pathology, and there is, unfortunately, a metaphysical pathology. We have long heard that old maids' husbands are always well behaved, and on the same principle the pathology of those who do not make post-mortem examinations is often confident and definite. He who has made

many post-mortem examinations is not so metaphysical in his explanations of the pathology of some of those cases of disease of which there is no known morbid anatomy. In looking carefully for himself into the coarsely concrete, a realistic habit of mind is produced in a person, and thus he avoids verbal explanations of those most difficult cases which are without known morbid anatomy—of those, for example, commonly called the neuroses. To my young hearers I say, always endeavor to obtain post-mortem examinations. If a man do not learn pathology when he is young, he is not likely to learn it properly later. I would urge on young medical men the formation of clubs for making post-mortem examinations. Let me mention a slender personal experience. Many years ago, at York, a club of this sort was formed. It had no other organization than the agreement that each member should obtain an examination whenever possible, and ask the other members to attend. The history was stated by the person who, so to speak, owned the case, and then each of us saw what there was to be seen, and notes were taken. In this way it is not difficult to get a large experience of direct value for practice.

Coroners' cases are important, not only for the sake of knowledge, but for discipline. A man has to bring his thoughts quickly to a focus. A collection of good reports on these cases would be very valuable for many practical purposes. I do not suppose that our editor has any space to spare, or I would suggest a department in the *Journal* for brief reports of coroners' cases.

A practitioner must not be a pathologist only, although, unless he be a pathologist, he cannot be a good practitioner. Division of labor, strictly or figuratively, is the law of everything whatever. Some of us work chiefly at physiology, some of us at pathology, and some of us at clinical medicine. But to be a good practitioner, a man must know much of all three, and most of us nowadays carry on the three lines of investigation. Every case is a departure from healthy states, and no one is fitted to begin the scientific study of diseased persons unless he know much of the anatomy and physiology of healthy people. To a great extent diseases are, metaphorically speaking, experiments, anatomical and physiological, on the human body. If it be not profane to say so, I would suggest that anatomists and physiologists might have more recourse to these "experiments." Charcot, in doing the best kind of pathological work, has, I should suppose, done as much for the anatomy and physiology of the spinal cord as any one living. He is clinical all round. The three things make up the clinical problem. I do not mean that we have simply to draw incidentally on our anatomical and physiological knowledge when we see a patient, but that anatomy and physiology are integral parts of every case we have to do with.

When we stand at the bedside of a patient, when we come close to our clinical work, there is before us an anatomical, a physiological, and a pathological problem. A great part of our clinical knowledge of cases is really nothing more than anatomical and physiological knowledge. The word disease is too vague; it is used in three senses, each of which should be individualized. Since I am about to speak of cases of disease, it is not needful to add, were it correct to do so, the adjective morbid to the terms anatomy and physiology. I can best illustrate by diseases of the nervous system.

In each case: 1. There is alteration of structure of some organ; here is an anatomical problem. 2. There is alteration in the proper functional activity of that organ; here is a physiological problem. 3. There is a change in nutrition of tissues of that organ; here is a pathological problem. In many cases we cannot carry out this threefold scheme. But we should attempt it in every one, in order that we may realize vividly what it is we do *not* know. There is a wider pathology than abnormal nutritive changes in one organ. There is not only the organ diseased or most diseased; there is also the rest of the patient to whom that organ belongs or did belong. I say, "or did belong," because sometimes part of an organ is annihilated. No clinically minded man ever forgets the wider pathology. We no longer believe that a patient "is attacked by disease," although we still use that expression, the metaphysics having long since died out of it. It would be better metaphor to say that the patient breeds the local disease himself, or that it has grown out of the whole of him; or, better still, to say, of many cases, that a certain part of a universally unsound system has fallen to pieces. So we examine our patient all over; we try to get to know as much as we can of the pathology of all important organs of the living patient.

Even yet our pathology is not wide enough. We must not consider the patient himself as more than a detached unit of his family; we have to note the tendencies he inherits, as well as to examine him to see how they are particularly evidenced in one branch or twig of a family tree.

If we take a case of a loss of speech, the threefold distinction in clinical investigation can be easily illustrated. To locate the lesion is nothing other than an anatomical conclusion. To ascertain that it has destroyed speech, that it has left the patient capable of understanding what is said to him, etc., is a physiological (and psychological) investigation. Pathology is concerned only with the nature of the lesion and with its mode of production. Nearly all that has been written on aphasia is anatomical, physiological and psychological disquisition.

To take a still more simple case in illustration; a man has hemiplegia. To think of the case as one of paralysis only, is like the habit of thought of old-fashioned zoölogists, who spoke of animals as if they had nothing particular inside of them, or, as Forbes said, as if they were skins stuffed with straw. We have three very different things to do, each easily done in most cases of this kind. From noting the region affected—face, tongue, arm, leg, etc.—we conclude that there is a lesion of the opposite corpus striatum. Now, this is only anatomical knowledge. Speaking figuratively, it is only an experiment made by disease on an organ. To locate disease is an admirable thing; but localization is not the most important clinical thing. If we stop in this stage, we know nothing of any value for rational treatment of the patient; we may have some good empirical expedients. Next, observing that the

region mentioned is paralyzed, we conclude that there is loss of function of some nerve elements, probably destruction of them. This—physiology—also is a knowledge by itself, of no avail for therapeutical purposes in such a case. But, lastly, by examining our patient all over, for now we have done, for the time, with his paralysis, and from certain empirical evidence, not needing to be stated now, we conclude that loss of function of the organ is caused by cerebral hemorrhage, that a clot has smashed up part of the corpus striatum. This is not enough. There is yet the wider pathology. A patient looks on this illness as an accident; the pathologist never takes that view of it. We often get to know with certainty that the local pathological change is but a local manifestation of a slowly progressing wide state of degeneration; that the man is rotten all over, and that he has one day broken down suddenly in a certain place; that he has chronic Bright's disease, atheromatous arteries, and an hypertrophied left ventricle. By considering these things and their inter-action, we see that he has long been preparing for what seems to him to be only an accident. I submit, that the process by which, in such a pathological state, he comes to have the local lesion—why an artery bursts—is, in chief part, a physiological problem; there is a physiology of the organism made up of bad materials as well as of the healthy organism. Further widening our pathological investigation, we may find that the patient is a twig of a gouty family tree.

Now, the pathology of lesions is the basis for treatment. The best illustration of indirectness of pathology is given by that most important clinical group of cases, syphilitic affections of the nervous system. Without denying that syphilis may primarily affect nerve-tissue, what I only feel sure of is, that it begins in subordinate tissues of nervous organs. The most nearly direct method of "attack," if I may use the word, is when a nerve trunk is the seat of syphilitic disease; but in other cases the process is indirect. Thus the commonest kind of so-called syphilitic hemiplegia depends directly on local softening of the brain, and indirectly on syphilis. This is an excellent illustration, showing how pathology gives precision to therapeutics. What a man has really to treat, if he is trying to cure a patient of syphilitic hemiplegia of this kind, is "local softening of the brain," not syphilis. The order is this: a man has a chancre; he gets rid of it and of subsequent secondary symptoms. Months or years later, when apparently well, except perhaps for headache, some of his cerebral arteries are becoming syphilitically diseased, and then one unfortunate day a branch is blocked up and he becomes hemiplegic. A very little change happens that day, although the consequences are grave; but for that little seeming accident there has been long, slow, insidious preparation. The syphilis is slow, the thrombosis is rapid. This case for treatment, so far as the hemiplegia is concerned, is as certainly one of local softening of the brain, as hemiplegia from ordinary embolism is. To call it syphilitic hemiplegia is all very well, but to think of the paralysis as being a direct result of syphilis is crude pathology.

Next, as to therapeutics. Suppose the patient recovers rapidly under iodide of potassium, should we say we had cured him? There are the facts that he is syphilitic, that he took the iodide, and is now well again. No one denies this sequence. But, then, it so happens that there is another fact. It is quite certain that some hemiplegic patients get well without any drugs whatever. Whether a patient recovers from hemiplegia or not is a question of the size of the lesion. Those who make *post-mortem* examinations do not invoke shrinking or disintegration of the plug, or re establishment of collateral circulation, because they know that they find holes in the motor tracts of patients who have recovered from hemiplegia—the patients got well, were not cured. So that the hypothesis that the iodide cured the patient is not warranted by facts. Of course, we should treat the patient for syphilis, for, besides more obvious reasons, there is the strongest presumption that other cerebral arteries are diseased, and we may rid them of disease. If the paralysis be transitory, we go on treating the patient for syphilis, to prevent further paralysis. Everybody has a well-grounded faith in the treatment of syphilis—or of its recent effects, at any rate. But I submit that if we could sweep away every vestige of syphilis by drugs, we should not, by so doing, cure the hemiplegia. It is easy to let ignorance stand to us for knowledge. We may believe we have cured our patient by drugs, because we do not know that hemiplegia will pass off without the use of any. But confidence is not always a sign of sagacity, but may result because we have not made numerous *post-mortem* examinations. In the case instanced, there is a plug in the vessel, and consequent local softening. For drugs to do anything toward ridding the patient of his hemiplegia, they must help to get out the plug and to restore starved nerve tissue. Now, as a matter of fact, there is in these cases actual destruction of nerve tissue. If we could look into the man's head we should see that a part of his brain is boycotted. We cannot get at it by drugs.

There is another kind of so called syphilitic hemiplegia, essentially unlike the one already mentioned. The facts are, that a man, the subject of syphilis, has pain in the head for weeks—the best time for anti-syphilitic treatment—significant of the formation of a cortical gumma. One day he has a convulsion, very often beginning unilaterally, and after it he is temporarily hemiplegic (sometimes monoplegic). The process by which the hemiplegia results from syphilis is a doubly indirect one. No one supposes that the gumma discharges; but that the nerve-cells around about it do. Thus, the stages are—(1) Formation of a gumma; next (2) induction of instability by nerve-cells, exactly as by a glioma, possibly by a sort of encephalitis; then (3) sudden excessive discharge; and (4) consequent hemiplegia.

Syphilitic paralysis of a cranial nerve, and the two kinds of syphilitic hemiplegia, are utterly different in the pathological changes on which the symptoms directly depend, although syphilis is respectively the direct, the indirect, and the doubly indirect cause of them.

There is a class of cases of nervous disease—the neuroses—of which the pathology is unknown; chorea, epilepsy, insanity, neuralgia. In these diseases, little or nothing definite has, according to most authorities, been found *post mortem;* and, curiously, the fact that nothing is found, used to be considered proof that there was nothing to find. The statement that we do not know what there is in a particular disease, is sometimes taken to be equivalent to saying that there is nothing. We call the neuroses functional affections—a term, I submit, which should be kept for physiology. There can be no alteration of function without some material change. A man who does not make *post mortem* examinations may look on slight and transitory local paralysis as not depending on a material change, but if he did make such examinations, he would not hold that hypothesis. I repeat that we do not know the pathology of the neuroses. But now comes the curious point. We speak most confidently of the inheritance, interchangeability, and fundamental community of pathological character of those very diseases of which the ascertained morbid anatomy is nothing, or next to nothing. Thus there is assumed to be a community of nature betwixt epilepsy and insanity. It may be so. For my part I have not heard of any facts tending to prove anything of the kind. The evidence adduced goes only to prove that many epileptics become insane. The neuroses are spoken of confidently as being nervous diseases in the sense that the pathological changes begin in nervous tissues. Where is the proof, when we know nothing of their pathology? There is *no* proof. Again, pathology prevents our ideas on this subject being out of focus. Suppose a man has epilepsy, or paralysis, or chorea, and suppose that all his relatives had the nervous symptom or disease, hemiplegia; is there any proof that he inherits a tendency to a nervous affection—that his epilepsy is owing to his nervous tissues *beginning* to go wrong! Not the smallest; because the hemiplegia is owing to arterial changes. If the family history in such a case tends to prove anything, it tends to show that the pathology of the patient's epilepsy is primarily arterial, and only secondarily nervous.

There is a metaphysical pathology. The cases are those on which we either do not obtain *post-mortem* examination, or find nothing *post mortem.* It is rather difficult to define metaphysics. Some people call psychology metaphysics; some call anything very difficult and complex about mind and body metaphysics; some use it merely as a term of abuse. It is, I think, a great pity that some metaphysics is not taught to students before they enter the profession. This may seem a strange remark, but the reason for making it is, not to urge that they should be metaphysical, but for the diametrically opposite reason that they should be less metaphysical. It is a mistake to suppose that those who write books on metaphysics are the most metaphysical. They have, at any rate, the knowledge that they are dealing with metaphysics. . . .

A good deal under the guise of practicality is pure metaphysics. There was once a man who could conceive an abstract Lord Mayor. The conception he had, so he averred, had neither head, arms, legs, nor corpulence; it was not an image of any particular Lord Mayor, nor a fusion of several, but an abstract Lord Mayor. Well, we think this metaphysician was too confident in his powers of conception. But do we not imagine ourselves capable of the same kind of marvelous feats? Let us look at a case of aphasia. A man does not speak, and yet can understand what we say to him, and can think—on ordinary things, at any rate. These are the facts; no one disputes them. Now comes the metaphysician, who proffers the explanation that the patient has lost words, but retains the memory or ideas of words. There are, it seems, words, and also memories or ideas of words, which latter, somehow, are not words. Now, what is an idea of a word which is not a word? It is, like the abstract Lord Mayor, simply nothing at all?

We should deal with the difficult and the complex in as realistic a manner as we do with the simple. The hysterical patient, who is said to have paralysis of the will, has some material change. What it is we do not know; and we never shall know, if we be content with metaphysical explanations, which, in one sense, explain everything, but really explain nothing. I have long expressed the opinion that, for the scientific study of diseases, we should regard them as examples of dissolution—using this term as the opposite of evolution. In this way we shall avoid the errors of confusing the psychical with the physical, and shall steer clear of metaphysical explanations.

Besides the sectional addresses already referred to, much interesting work was done in all the Sections. In most of them, in addition to the usual papers, special subjects had been selected for formal discussion. Thus, in the Medicine Section, the treatment of aggravated hysteria and allied forms of neurasthenic disease, chlorotic murmurs, and dropsy; in the Surgical Section, the early treatment of joint disease, and bone-setting; in the Obstetric Section, subinvolution of the uterus; in the Section of Public Health, the alcohol question, and the notification of infectious diseases; in the Ophthalmological Section, the extraction of cataract; a goodly array of important subjects. As it was impossible to be everywhere at the same time, I cannot say anything on these points, which I regret. In the Pathological Section, also, some interesting discussions took place,—first, on diabetes, in which Dr. S. Mackenzie, Dr. Pavy, Dr. Saundby, and others took part. Mr. Hutchinson opened a discussion on the origin of tumors, in which Sir James Paget, Mr. Butlin, and Dr. Thin took part. On the third day the subject of bacilli was gone into. Dr. Heron (London) demonstrated Ehrlich's method of showing tubercular bacilli; and Dr. Heneage Gibbes (London) demonstrated his own method. For this he claimed greater simplicity in all the details; the bacilli were visible with ordinary illumination and low powers. In the Surgical Section some interesting discussions took place. That on the treatment of joint diseases left us much where we were before. That on bone-setting, introduced by Mr. Marsh, followed by Mr. Adams, elicited a very good paper from Mr. Dacre Fox, who has had large experi-

ence, and is in a position to speak with authority on this matter. He especially advised greater attention on the part of medical men to the slighter forms of injury, and to sprains, from both of which injuries the older bone-setters had made nearly all their reputation. In the same Section, Mr. Lawson Tait read a paper on "A Series of One Hundred Consecutive Cases of Ovariotomy performed without any Listerian Details." He had had three deaths—one from accidental suffocation during vomiting, the other two from thrombosis, extending from the ligature to the heart. Of these 100 cases, 6 were pregnant; all got well; 1 aborted, the other 5 went to the full period. One had acute peritonitis at the time of operation; 3 got peritonitis during treatment. Of the 100 cases, 2 were solid fibromata of the ovary, both recovering; of the remaining 98 cystoma 11 were parovarian tumors; in 60, one ovary was alone affected—3 deaths; in 27, both ovaries were affected; all of which recovered. In 53 of the total number there were serious adhesions; in the three fatal cases there were no adhesions in two; slight adhesion in one. He attributed his success to the following points: First, to the abandonment of the clamp; secondly, to careful cleansing of the peritoneum; thirdly, to careful drainage; fourthly, to increased personal experience; fifthly, to the discontinuance of previous tappings (the two fatal cases of thrombosis had been tapped sixteen and thirty times respectively); sixthly, to the complete abandonment of antiseptics; seventhly, to the establishment of hospital discipline and hygiene.

American Dermatological Association.

The American Dermatological Association met in annual session at Newport, R. I., August 30, 31 and September 1. The President, Dr. J. Nevins Hyde, of Chicago, in addition to the annual address, read a paper on "Papillary Dermatitis of the Hairy Scalp," a rare form of skin disease situated at the junction of the back of the neck and the scalp. It consists of elevated patches, which, upon puncture, give exit to pus, followed by a sanguineous gummy fluid. The disease is due to an inflammation of the skin follicles.

Dr. C. Heitzman, of New York, read papers on "Myxo-angioma of the Skin" and "Ergot in Some Forms of Skin Disease." He recommends ergot, in half drachm doses of the fluid extract, several times daily, in pruritus and acne.

Dr. R. W. Taylor, New York, read "Notes on Psoriasis," in which he stated a syphilitic origin for one-fourth of his cases. Dr. George A. Rohi, of Baltimore, has observed two cases following vaccination with bovine virus.

Dr. Henry G. Piffard, of New York, read a paper on "Calx Sulphurates." He believes that acne can be successfully treated by sulphide of calcium, in doses of from one-eighth to one-sixth of a grain. Failures occur from giving it in too large doses. The composition of the drug, also, is very variable. He noticed that in a diabetic patient the sugar entirely disappeared while taking this remedy. Dr. William A. Hardaway, of St. Louis, illustrated, by a life-size painting, a curious case of pigmented neoplasm of the skin, which first appeared after the patient had unadvisedly taken large doses of iodide of potassium.

Dr. A. R. Robinson illustrated, by microscopic slides, a paper on "The Nerves of the Skin." He demonstrated that the nerves do not terminate in free ends, as usually supposed, but form loops, and return into the superficial or deep plexus, or into a neighboring papilla.

Dr. James C. White insisted strongly that leprosy is inoculable.

Syphiloderma papulosum carcinatum was talked about by Dr. I. E. Atkinson, of Baltimore. This rare cutaneous lesion belongs to the early stages of syphilis. The spots are due to a single papular development, which slowly enlarges until it covers a space as large as a silver dollar. The eruption may be sparse, or it may involve the entire body. Its course is slow. It resembles ringworm, from which it can be differentiated by the microscope.

Dr. White, Chairman of the Committee on Statistics, presented a tabulated report based on 58,617 cases of skin disease observed by members of the Association.

The next place and time of meeting will be Lake George, on the Wednesday nearest September 1st, and the two following days.

The following officers were elected for the ensuing year: Dr. R. W. Taylor, of New York, President; Drs. I. E. Atkinson, of Baltimore, and A. R. Robinson, of New York, Vice-Presidents; Dr. A. Van Harlingen, of Philadelphia, Secretary; Dr. George H. Rohé, of Baltimore, Treasurer.

Pharmaceutical Articles.

PACKER'S TAR SOAP.

Dermatologists are well aware that soaps made from rancid fats or by careless methods act as irritants to the skin, and both set up and maintain diseased conditions of its surface. A pure soap, carefully prepared from vegetable oils, is something worth knowing and having. We can speak from personal experience that Packer's Tar Soap meets these requirements. It is exceedingly smooth and agreeable to the skin, and as it is combined with pine tar, it is valuable as a remedy in cutaneous affections, as well as pleasant for a toilette article. We commend it, without hesitation, as the most satisfactory soap, in both these respects, that we have ever used.

The Duration of Isolation in Infectious Diseases.

The *Medical Times and Gazette* says that the Minister of Public Instruction some time since addressed a note to the Académie de Médecine, requesting that body to furnish him with an answer to a question of great importance to schools and families, viz., How long should a scholar suffering from infectious disease be kept separated from his schoolfellows? This was referred to a committee, consisting of MM. Roger, Bergeron, and Hillairet, and their report appears in the *Bulletin de l'Académie*, for July 18th. M. Hillairet, after stating the periods of duration of contagious action of the various diseases concerned, arrives at these conclusions: 1. Pupils attacked by varicella, variola, scarlatina, mea-

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sles, mumps, or diphtheria, should be rigorously isolated from their schoolfellows. 2. The duration of this isolation should be forty days for variola, measles, scarlatina, and diphtheria, and twenty-five days for varicella and mumps. 3. This isolation should not be broken through before the convalescent has taken baths. 4. The clothes which the pupil was wearing when he fell ill should be passed through a stove at more than 90° Cent. of temperature, then submitted to sulphur fumes, and thoroughly cleansed. 5. Bedding and curtains of the room, the walls and furniture of the apartment, should also be thoroughly disinfected and washed, and then aired. 6. A pupil who has been attacked by one of these diseases while away from the establishment should not be readmitted unless furnished with a medical certificate that the above mentioned prescriptions have been complied with.

Galvano-cautery in Surgery.

We learn, from some remarks recently made at a meeting of the Medical and Chirurgical Society of London, by Dr. Felix Semon, that the credit of the introduction of the Galvano-cautery in Surgery, usually ascribed to Middeldorpf, of Breslau, is, in reality, due to Mr. John Marshall, of University College, the President of the Society. Mr. Berkeley Hill, we believe, deserves the credit for this vindication of his countryman's and colleague's merit.

Personal.

—Dr. David W. Cheever, of Boston, who has been nominated for the Professorship of Surgery in the Harvard Medical School, rendered vacant by the resignation of Dr. Henry J. Bigelow, is a son of the late Dr. Charles A. Cheever, of Portsmouth, N. H., and was graduated at Harvard College in 1852, and at the Harvard Medical School in 1858. He has since won a very eminent position in his profession.

Items.

—An important literary and scientific discovery is announced from Salonica. The works of the celebrated physician, Galen, which were supposed to have been lost, have been discovered by M. Papageorges. They are in manuscript; date from the fifteenth century, and appear to have originally formed 248 sheets; 144 are in good condition, 24 are mutilated or worm-eaten, and 80 are missing.

—Paris has a commission for regulating the height of buildings, which are graded to correspond to the width of the street upon which they front. Houses may be forty feet high on streets twenty-five feet wide. In no case are they permitted to be over sixty-five feet high, and only then when the streets are sixty-five feet wide or wider.

—A terrible death happened recently at Walsall, where a youth died in fearful agonies, from the effects of having drunk a mixture of nitric acid and mercury, in mistake for ginger beer.

—Lisbon diet drink is made as follows: Sarsaparilla 90, red sandal wood 90, white sandalwood 90, rosewood 30, guaiacum 30, sassafras 30, mezereon root bark 15, black sulphuret of antimony 60, boiling water 3600 parts; infuse for a night, boil down to one-half, and toward the end of the operation add liquorice 15 parts.

—In the loss sustained by Mr. James Mackie, surgeon to H. M. Consulate at Alexandria, by the destruction of his house in that city, is included an almost unique collection of calculi, the result of twenty-two years' surgical work in the Deaconesses' Hospital; also his library and all his surgical apparatus.

—Among the prizes awarded by the French Academy of Medicine at its last annual meeting, one of 10,000 francs, which is only awarded every six years, was divided between Dr. H. J. Bigelow, of Boston, and M. Th. Auger, Dr. Bigelow receiving 6000 francs and M. Auger 4000 francs.

—The seat left vacant in the section of Medical Physics and Chemistry of the Académie de Médecine, by the death of M. Briquet, has been filled by the election of M. Gariel, who received fifty-seven of the votes of the sixty-eight Academicians present.

—Admiring the example set by the Princess of Wales and many distinguished English ladies, the Parisian ladies are now sending flowers to the hospitals and to the sick poor.

—A remarkably low death rate is recorded at Dover, England, during the past quarter, the total deaths representing an annual rate of 9.1 per 1000 of population.

—M. Fauvel relates an instance in which he found a bullet in the larynx ten years after it had entered the head.

OBITUARY NOTICE.

DR. ANDREWS E. BUDD.

Dr. Andrews E. Budd died in Mt. Holly, N. J., August 12th, 1882. Dr. Budd was born in Woodbury, N. J., July 18th, 1816; attended a full course of lectures on medicine in the University of Pennsylvania, and graduated in the spring of 1842. He began the practice at once in Vincenttown, N. J.; removed to Medford, N. J., in 1845, where he practiced eighteen years. He removed to Mt. Holly, N. J., in 1863, where he practiced the remainder of his life. He was a member of the Burlington County Bible Society, and had held the offices of President, Secretary and Treasurer. He was a delegate to the American Medical Association at New York and Philadelphia, and was last appointed to attend the Association at St. Paul. For some time he had been an efficient ruling elder in the Presbyterian Church. Dr. Budd was eminently useful and influential in the church and community, and his removal is felt most deeply by all.

DEATHS.

ROSENBERGER.—Died, Kate, wife of S. Rosenberger, M.D., No. 2260 N. Seventh street, of this city, in the 53d year of her age.

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Communications.

HERPES ZOSTER NOT A SKIN DISEASE.

BY C. C. THAYER, M.D.,
Of Clifton Springs Sanitarium, N. Y.

There are few diseases whose nosology has undergone such mutations as the one now under consideration. At one time it was pronounced an exanthema, Hippocrates; again, a corrosivous, Paulus Ægineta; again, a dartros, Alibert; again, a dangerous and malignant malady, Planter and Hoffman; again, a neuralgic affection, Rayer; again, a neuritis, Ziemssen.

Its pathological changes and morbid anatomy declared to be in the skin, Galen; in the mental emotions, see Gibert; in spinal ganglia, Bärensprung, etc. Its etiology, atmospheric changes, contagion, constitutional dyscrasia, etc.

Its treatment has been correspondingly varied. General blood-letting, vaccination, fomentations, plasters, ointments, lotions and actual cautery (the latter I saw lately recommended in the London *Lancet*).

Its changes in nomenclature are equally interesting and peculiar. Hippocrates called it herpes; Paulus Ægineta, a corrosivous; Pliny, zoster; Celces, ignis sacer; Cullen, erysipelas phlyctenodes; Sauvages, erysipelas zona; Willan, herpes zoster; Schwarz, zona serpiginosa; Alibert, herpes phlyctenodes, zona farmis, dermatoses eczematenses, cingulam, shingles, etc.

All the Greek and Arabian Fathers classified and treated it as purely a skin disease, except Ser. Mercurialis, who, strangely enough, never even mentions the disease in his able book on cutaneous diseases of the 16th century. Up to the beginning of the present century, nearly every author adopted the classification of the Fathers. Later, some have deviated in particulars; *e. g.* Alibert attempted to individualize several forms of herpes, and gave this the name dartu phlyctenöide en zone, which, though a step in advance, was, after all, virtually adopting the generic title used by some of his predecessors, which includes also erysipelas and pemphigus.

Later, Willan and Bateman presented a new and improved classification. And the same is true of Wilson, Fox, Duhring and others, who, looking back of the advanced manifestation of the disease upon the skin, recognize morbid changes peculiar to the disease elsewhere than in the skin, and primarily so.

Yet in many of our most prominent works on dermatology, herpes zoster retains its early classification among skin diseases. Within the last half century extended investigations have disclosed a remarkable discrepancy between the nature and seat of the primary morbid changes, and the classification of this disease.

1st. That morbid changes exist in the skin is sufficiently obvious.

2d. That they exist elsewhere than in the skin is also evident, by various incontrovertible testimony.

Rayer says zona seldom shows itself as a perfectly simple or uncomplicated disease. The lymphatic glands are often inflamed; pleurisy, bronchitis, diseases of the stomach and bowels are among the most common affections connected with—and that coincide with—zona. "I may

add that other morbid conditions almost always accompany this vesicular inflammatory affection of the skin."

If we turn to post-mortem examinations, the above proposition will be found to be fully sustained.

In *Centralblatt*, Wyss gives a very interesting and instructive account of a post-mortem case.

The post-mortem examination was conducted with great care. The herpetic vesicles and scabs were very accurately limited to the right side and to the parts supplied by the first branch of the right trigeminal nerve. The left eye was perfectly normal. The nerve above mentioned was found to be broader and thicker than that of the left side, of a deeper gray-red color, of softer consistence, and with several nerve fasciculi separated by grayish-red, soft tissue, containing many vessels. This alteration in its character extended from the point where it entered the orbit to the finest branches, as far as they could be traced with the simple lens.

The other nerves traversing the orbit were perfectly healthy. Outside the orbit, and extending from it to the ganglion Gasseri, the first branch of the fifth was surrounded by extravasated blood. On the proximal side of the ganglion Gasseri the fifth nerve was normal in appearance. The ganglion itself was larger, and somewhat more succulent than the left; upon its inner side was a red mass that appeared to be caused by ecchymosis.

The proper substance of the ganglion was not of a yellowish-white color, but bright-red.

The fifth nerve was healthy at its apparent origin from the brain, where it entered into the Gasserian ganglion. There were numerous ecchymoses.

Similar observations have been reported by Trousseau, Danielssen, Hutchinson, Hebra, Weidman and others. Fox records a case of Paget in which herpes affected the parts supplied by the infra-orbital, the anterior dental, and the anterior palatine branches of the superior maxillary nerve. After catching cold the patient was attacked on the third day with herpes of the cheek, side of nose, the upper lip, the palate and buccal membrane. The final results were in some respects remarkable, and in keeping with the explanation as to the implication of the main nerve trunk.

A bicuspid fell out on the sixth day, a second on the seventh, and later still the canine and two incisors while the alveolus in part necrosed.

3d. That morbid changes exist elsewhere as well as in the skin, and that *primarily so*, is equally evident. Pain is a characteristic symptom of this disease and is always from one to five days prior to the eruption, and is always in line with the nerve upon which the eruption subsequently appears.

Some of the most inveterate cases of occipito-facial neuralgia, toothache, and pleurodynia are precursors of herpetic eruption, and invariably indicate its relative location.

The popular notion that if the shingles completely encircle the body death would certainly follow (attributed to Pliny) is anatomically impossible, save in a double attack.

The above well authenticated post mortem reveals the primary morbid changes of herpes zoster to be in the neurilemma, nerve tissues, or spinal ganglia. Twenty years ago Bärensprung projected the idea that the primary seat of pathological changes was in the spinal ganglia. This was in opposition to the vaso-motor theory, arguing that vaso-motor disorders would not produce new products, as is the cases in herpes zoster. This idea of Bärensprung has been substantially endorsed by Esmarch, Charcot, McCrea, and others.

Lately two cases similar to each other have come under our care, illustrating this view.

I will mention one. Mrs. S., aged 65, was taken, December 5th, with a pain behind the right ear. Soon febrile symptoms appeared, and on the third day the pulse was 120, temperature, 100°. The pain, which had now become violent, resisting all treatment, extended from the base of the brain to the eye, on the right side. The fourth day the eye was injected and very painful, the right nostril swollen and closed.

A few distinct characteristic red spots now appeared on a clean base at the exit of the right supra orbital nerve.

These continued to increase in size and numbers, extending upon the forehead, and situated upon a narrow, swollen ridge, which ran, in direct line with the extension of said nerve, to the crown of the head, which was exceedingly painful to touch, much more so than other parts of the head. Herpetic eruptions also appeared on the right side of the nose. Upon the appearance of the eruption the pain began to diminish; still the patient was confined to her bed. The eruption lasted about ten days, when the scabs dropped off, leaving the parts very red and sensitive.

The diminished pain merged into a sore feeling, followed by an itching sensation, which often provoked the remark, "Oh, I wish I could scratch the inside of my head." A month has passed, and though the patient is pursuing her

usual avocation, the eye is still very red, and the other affected parts are in a state of hyperæsthesia.

If the above citations and considerations be correct, then herpes zoster is unscientifically classed among skin diseases.

Secondly, it is not of vaso-motor influence, but partakes of the nature of a neuritis, and, thirdly, the attending eruption is not the disease, but only an outward manifestation of it—a phenomenon similar to that illustrated in meningitis and typhoid fever.

THE SALICYLATES IN ACUTE RHEUMATISM.

BY GEO. P. YOST, M.D.,
Of Loganville, Pa.,
Lecturer on Dermatology, Baltimore Medical College.

In order to treat any disease intelligently, we must look closely into, and have an intimate knowledge of, the etiology, pathology and morbid antomy of the disease under consideration; as well as know the physical and chemical action of the remedies which we employ in our endeavor to cure it.

So with the salicylates in acute articular rheumatism. To feel satisfied that we are justified in abandoning time-honored remedies for something comparatively new, we must inquire into the nature, source and action of the drug, and see whether it will counteract the morbid conditions in the body which bring on rheumatism. Having found this satisfactorily, and clinical evidence upholding the theory, we should not hesitate to give our patients the benefit of such proof.

The question, then, arises, Have we any one drug which seems to be theoretically indicated in the treatment of acute articular rheumatism, the clinical experience of which seems to uphold the theory? I must say that I believe that salicylic acid and its compounds hold that place in the treatment of rheumatism, and the object of this paper is to prove the correctness of my belief.

In order to do this, let us first look at the etiology, pathology, etc, of rheumatism.

The different theories advanced in regard to the cause of rheumatism may conveniently be classed under two heads; viz.: the increased fibrin theory and the lactic acid theory of Prout.

The first is, perhaps, the older of the theories advanced, and we can scarcely help but believe that the older observers found fibrin in the blood (an excessive amount, as they thought). Of course, if they found fibrin, it was abnormal, for normally fibrin does not exist in it—only its elements—which need an intervening (acid?) ferment to cause them to unite and form fibrin. (Faster.)

The acid theory is accepted by perhaps the larger number of observers as the true one; though denied by some.

This theory seems almost conclusive to the ordinary observer, from the fact that in nearly all cases of acute articular rheumatism we have acid urine and perspiration.

It is, at least, the theory upon which most practitioners based their treatment before the introduction of salicylic acid and its compounds.

I believe the "acid" theory to be the correct one; and the alkaline treatment to have been the proper thing as far as it went, but I believe we should go a step further; look for and treat the cause which produces this *acid* condition, which, it seems to me, has heretofore not been done.

Accepting either theory, treatment should be applied, not only to the removal of the existing condition or disorder, but remove the cause, stop the formation of acid in excess, or prevent the formation of the ferment which causes the unity of the fibrin elements (paraglobulin and fibrinogen).

Having now, as it were, the work before us, the question arises, have we any remedy or set of remedies that will meet the indications?

I cannot do otherwise but say, yes. In salicylic acid and its compounds we have the very remedies to do all this.

To prove the assertion, I will quote the results of a few experimenters and observers on the uses of said remedies.

In 1875 Dr. Ludwig Lelzeritz, in a series of experiments (with salicylic acid), found that in varying strengths it had the power to arrest the movements of bacteria and micrococci, as seen under the microscope.

About the same time, C. Neubauer, Kolb's illustrious student, in a number of experiments with the "salicylates," found them to possess preservative properties and prevent *acid fermentation.*

Accepting, then, Neubauer's results as true, we have only to show that the very morbid actions which these drugs prevent, are the ones which give rise to the phenomena of rheumatism, and we substantiate our affirmation in favor of the salicylates.

In support of this we find different observers

agreed upon the ferment theory giving rise to acid in excess.

Dr. Johnson, of Birmingham, in a paper read before the British Medical Association in 1875, says, as to the cause of rheumatism:

"The non-conversion of starchy food into glucose, in consequence of irritation from improper food, or from exposure to cold and damp, and the conversion, in the cæcum, of the undigested *starch* into lactic acid, which, being absorbed, produces the phenomena of rheumatism.

At a meeting of the Cambridge Medical Society, in 1880, Prof. Latham advanced still another theory as to how lactic acid is formed, causing rheumatism, and how the salicylates are beneficial. He says: "The first step was a lowering of the 'inhibitory chemical centres,' or nervous centres which control oxydation in the muscular tissue. Following up this, the oxygen in the oxyhæmoglobin, instead of entering the muscular tissue, to be exhaled therefrom in the form of carbonic acid gas, has its sojourn in the tissues shortened, and passed into the blood in the form of lactic acid. This acid, then, being rapidly oxydized in the blood, instead of the muscular tissues, develops an abnormal amount of pyrexia." Speaking of salicylic acid he says, "It lowers the temperature and cures the disease by chemically combining with the substances from which the lactic acid is derived, and producing less heat than would result from the oxydation of that substance."

Take the verdict of clinical observations, and what have we? Simply this: Looking over files of any live medical journal, for the last three or four years, we find them full of testimonials in favor of the salicylates. I will refer to a few; to quote them all would fill a volume.

Dr. Maclagan (*British Medical Journal*, 1876), says: 'I have used salicylic acid in every case of acute rheumatism which has come under my care for the last eighteen months, with invariably the same result, a rapid cure of the disease." He further says: "Seeing a patient suffering from acute rheumatism, I have no hesitation in assuring him that within forty eight hours, possibly within twenty-four hours, he will be free from pain, etc."

In the report of the Leeds Infirmary, recorded in the London *Lancet*, we read of similar good results with the salicylates.

Dr. DaCosta and a host of others in our own country speak in a similarly favorable manner of it.

So far as my observations go, I must confirm the favorable reports of others, for I have had good effects from it for the last four years, in all cases but one (in which it did no good). In two cases it acted so strikingly favorably, that I would not feel as having done my duty toward my rheumatic patient, did I not give him the benefit of the salicylates.

I use the salicylate of soda. In one case it relieved all pain and fever in twenty-four hours, and in another one in eighteen hours.

I do not wish to prolong this paper by the rehearsal of cases with full notes, or any new ideas, for I claim nothing new; but if the collaboration of these few facts, gathered here and there, will induce some over conservative medical brother to give his suffering patient the benefit of a trial of the salicylates in rheumatism, I will feel paid for my little labor.

So thoroughly am I convinced of their efficacy that I believe they (salicylates) will become to rheumatism what quinia is to malaria.

A NEW ANATOMICAL TRUSS IN THE TREATMENT OF RUPTURE.

BY J. H. WARREN, A.M., M.D.,
Of Boston, Mass.

The subcutaneous method of injecting the hernial rings is no longer an experimental operation or one of doubtful expediency. It is an established and successful procedure. Of course, it has not in the hands of every surgeon been every time successful. It has had its failures, and who is able to mention the simplest surgical operation of which the same cannot be said. When, however, I consider how sadly its elements and principles have been misunderstood by many of the profession, who are looked upon, moreover, as authorities in surgery, I am more than astonished that it has met with such almost universal success as it has. Some even now think that the success of the operation depends upon setting up an inflammation in and around the sac; that is, a peritonitis; others as unreasonably suppose that we avoid all inflammation whatever and excite only an imaginary "tendinous irritation," so called. Few comprehend that the operation, while it avoids general peritonitis, strives to excite an inflammation in the fibrous tissues of the rings and the canal, and that there is no such thing as a tendinous irritation, in the sense in which it is commonly used.

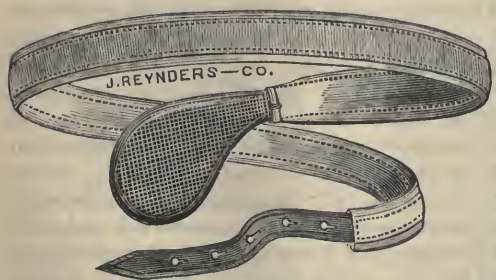
When the operation has been properly performed, and with an understanding of its surgical requirements, it has, so far as I can ascertain from trustworthy data, been successful to such an extent that I do not think I am egotistical

or over sanguine when I say that, in my knowledge and experience, there is no operation for hernia which promises so much for the patient and disturbs him so little. All success with the operation, however, is dependent upon the care with which the minutest details are scrupulously observed; and I maintain that when the proper instruments and sufficiently stimulating food is employed in the proper manner, one important step in the operation has been well taken. These principles and details I have endeavored candidly to present to the profession in my "Practical Treatise on Hernia."

Another important element of success remains to be considered. When I began to operate for hernia by the method of subcutaneous injection, I was troubled to obtain a suitable truss to be worn by the patient, and one that I could conscientiously recommend. The trusses that are in common use are constructed upon a plan that is entirely erroneous and absolutely injurious. They have a pad of wood or metal, stuffed with hair or some soft substance and covered with leather. They are thus very heating and inconvenient to the patient, because they prevent the exhalation of moisture and perspiration from the body.

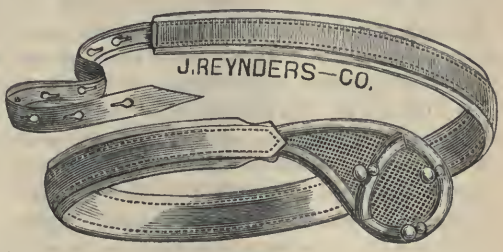
This is not, however, their only defect, nor is it their most serious one. The shape of the pad is convex and in direct antagonism to the anatomy of the parts to which the truss is applied. By its constant pressure it has a marked tendency to dilate, weaken and paralyze the rings, instead of contracting and strengthening them. Thus, in the course of time, the pad that has been worn is no longer sufficient to retain the hernia, becomes painful and even unendurable, and finally has to be thrown aside and a larger pad applied.

Recognizing these deficiencies, I have devised a truss which I think will meet all the demands. The pad is composed of a rim of tubing, in sizes from Number 12 to 21, over which a very fine



wire gauze is tightly drawn and neatly soldered. The plane of the pad is slightly concave, in order to accommodate it to all the anatomical relations, and can be still further adjusted by the surgeon to any individual case. The gauze being drawn tightly over this rim gives us a flat pad, which presses upon the body like the human hand, the best of all trusses. The pad is soldered at its neck to the spring, and is so shaped that it will not press upon the spermatic cord, in scrotal hernia, nor too hard upon Poupart's ligament, in femoral. Neither will it glide over the ligament and slip into the groove of the groin, as does the common pad.

There is a bridge of tubing over the pad, which serves to strengthen it, and may also assist in retaining in apposition to the body a sponge, either medicated or moistened simply with cold water, for the purpose of reducing inflammations. The pressure of the pad can be applied in any



direction, as there are three knobs for the attachment of the strap.

Between the pad and the integuments a layer of cotton flannel, either single or double, should be placed; this can be renewed by the patient as often as desired. The perineal band consists of a small gum-rubber tubing, or a coarsely braided silken cord. This will be found far more comfortable to the patient than the flat and sharp-edged strap, which soon cuts and chafes.

It will be evident to all that this is a very light and comfortable truss. It is hygienic, and is accurately fitted to the parts. It is anatomical, because it tends to draw the pillars of the rings together rather than to separate them. Hence, even if used without the operation of injection, such a truss is better fitted to effect a cure of hernia than any convex pad in use.

The springs are of varying degrees of stiffness. One is very soft and gentle in its action, and is more especially adapted for use after the operation of subcutaneous injection. It can be applied eight or ten days after the operation. Others are stronger and are better adapted for those forms of hernia where a truss is to be worn without an operation having been performed. They can be worn with perfect ease, night and day, without removal, as they are non-corroding, and are covered with the best grained or Russia

leather, made impervious to water by the process of the Boston Waterproofing Company.

These trusses are so radically different from all preconceived ideas in the application of all artificial support, that it might, at first sight, seem to some, especially to those who are manufacturers of surgical instruments, that the springs are too gentle in their action. This is an error, for one would soon find it physically impossible to wear an ordinary truss with a stiff spring night and day. The spring is made gentle for a purpose, and this purpose would be defeated by a stiffer spring. Nor is it necessary, with this anatomical spring pad, to bind a man with a stout, stiff hoop. A very gentle pressure, if only properly applied, will be sufficient to give adequate support.

To show the value of this truss, it will be necessary to give only a few characteristic cases from my clinical experience, which has been by no means limited in this direction.

Mr. G., age 40, with a large, direct hernia, was operated upon subcutaneously, in the early part of the summer of 1881. Ten days after I injected him with my Formula C I applied the anatomical truss, which he continued to wear, night and day. The result was a perfect cure of the hernia, so that he was able to abandon the use of the truss from that time. While he was wearing the truss he met with two accidents—one a fall down a flight of stairs; the other a violent strain while righting up a coal cart. Notwithstanding all this, the result was a perfect cure of the hernia, so that he was able to abandon the use of a truss after having worn it three months.

Mr. C. McC. was operated on early in October, 1881, for a double oblique inguinal hernia of ten years' duration. Eight days after the operation I applied this truss, which he wore for three months, night and day. During this time he slipped on the ice and was slightly re-ruptured on the side where the larger hernia had been. He consulted me about the first of January. I found the new hernia to be a direct one. I ordered him to continue to wear the truss, and in April found him cured on both sides. He wears the truss now for safety, whenever he is to undertake any heavy work requiring violent exertion.

Dr. D. was operated upon in November, 1881. He was 54 years of age, and was ruptured on the left side when 20 months old, by a nurse falling upon him while carrying him in her arms. The hernia was very large, the scrotum being filled and distended with intestine and omentum. All kinds of artificial supports had been applied without the least benefit. Finally, the parts became so irritable that no support could be endured. The doctor is a liberally educated, conservative gentleman, and a surgeon of experience in the late Confederate Army. To give his evidence upon the value of the anatomical truss and operation, I quote from a letter written to me by him on May 22d, 1882. He says: "My general health has been excellent since I saw you, and I am persuaded that the operation for hernia will prove an entire success. By strict observance of all your instructions, I have escaped all accidents, and feel as strong and sound in the region of the operation as I do upon the opposite side. I cannot imagine a case that could have progressed more favorably or promised better results. I have frequently placed my fingers on the truss pad during the act of coughing and sneezing, to receive the impulse of the viscera, but cannot detect that there is any more sensible movement communicated by the pad than the general vibration felt over the entire abdominal wall.

"It is difficult for one like myself, who has been so long impeded in his movements, and who so suddenly regains or rather acquires strength and a feeling of security from danger, to restrain himself from excesses, and the effort to control my exuberant spirits is almost beyond my power of will."

This was one of the most hopeless cases I ever operated on, and had the patient not been a physician, who knew how to take care of himself, I should not have undertaken the treatment.

To illustrate the well known fact that recent hernia may often be cured by wearing a truss persistently, even without any operation, I select the two following cases:—

Mr. W., a builder, aged 35, referred to me by Dr. W., had a direct hernia upon the right side, of about the size of a hen's egg. I, being sick at the time, postponed the operation for six weeks, advising him in the meantime to wear a truss. At the end of this time I found the rings so firmly united and occluded, from the wearing of this truss night and day, that no operation seemed necessary. At the time of writing this the patient seemed cured, without operation.

Mr. B., aged 30, applied to me in December, 1881, with a small hernia, caused by a violent fit of coughing. Being engaged with more formidable operations at that time, I deferred operation upon him for a few weeks, advising him, meantime, to wear a truss night and day. He neglected to present himself for operation until

early in May, 1882, at which time I considered him entirely cured, and advised him to discontinue wearing a truss.

These two latter cases illustrate the well known fact that recent hernias can often be cured by persistently wearing a truss, even without any operation. If, then, hernia can be cured in its early stage by a properly adjusted pad, it is not surprising that old hernias can likewise be cured by a suitable pad, if once the fibrous rings are freshened and stimulated into activity.

Finally, if by any of my writings I have aroused any new zeal in the profession for the study of this operation, and caused the mist that was hanging over it to disappear in any degree by study and investigation, I shall have accomplished one great aim and desire that has urged me on.

Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROF. W. H. DRAPER.

Reported by H. H. Seelye, A.M., M.D.

Laryngeal Phthisis.

The patient's name is M. T.; is a native of Ireland; aged 35; single; a shoemaker by trade. He was admitted to the hospital on October 25th, 1881. Has been a moderate drinker. His family history is negative, but three of his family died in infancy. He had never been sick until last March. Two years ago he came from Australia, where he had been living. Seven months ago, while in Nebraska, he caught cold, which caused him to cough and expectorate a good deal. But he got better and was comparatively well until about three months ago, when he began to get worse. He complained of a pain in his chest, loss of strength, night sweats and shortness of breath on exertion, and he became so weak that he was obliged to give up his work. These symptoms steadily increased in severity until about a month or six weeks ago, when the night sweats ceased. But his skin and mouth now became dry, and there was a sense of irritation in the mouth and throat, which caused him to cough a good deal. In this condition he came to the hospital. He had no diarrhœa, and no gastric or urinary symptoms. On admission his pulse was 87, respirations 32, and temperature 100.9°.

Gentlemen, there are certain features in this history which I think are worth speaking about. The disease appears to have originated six or seven months ago, in a man who up to that time was in good health, and according to him it started from a cold. And he says that he first lost his voice a month or five weeks ago. The first point to notice is that though he began to cough in the spring, yet he got better and had no special trouble until three months ago, and there were no laryngeal symptoms until six or seven weeks ago. And since that time he has lost his voice, and coughing and speaking have become painful, but deglutition, which is often very painful in these cases, is not so here, as yet. This history, then, would seem to indicate that the disease began in the lungs, and it had made considerable progress before the laryngeal trouble began. This is the usual history of so called "laryngeal phthisis." I speak of this fact because many of these patients are treated as cases of local laryngeal affections, and often painful and irritating applications are made to the larynx, when the serious part of the disease is not here, but in the lungs.

Another point in these cases is that the lung disease is often, and I may say, generally, limited in extent, and the constitutional symptoms are out of all proportion to the extent of the local disease. So these patients take no notice of the phthisical trouble, but they come for relief of the laryngeal distress, and then, upon examination, it is found by the physician that the phthisis is the primary and important malady. We will now see what the physical examination will show in this case.

Inspection.—The patient is quite emaciated, so that the ribs are prominent beneath the skin. The superior and inferior clavicular regions are both depressed. The cardiac pulsation is quite marked, and it is diffused over a considerable space, and a little higher up than normal.

Palpation.—The expansion of the chest seems a little more marked on the right side. The vocal fremitus cannot well be obtained, because of his aphonic condition.

Percussion.—There is slight dullness in front, over the apex of the right lung. Over the same region, on the back, there is decided dullness; and also slight dullness in the supra-scapular fossa on the left side. The area of dullness on the right ceases in the infra-scapular fossa, and below this there is good pulmonary resonance.

Auscultation.—Over the upper portion of the right lung, posteriorly, the respiratory sounds have a bronchial rather than a vesicular character, and the expiratory sounds are so prolonged as to nearly equal in length the inspiratory, and they are blowing in character. True vesicular or slightly exaggerated breathing is heard below this region. Over the front of the chest, at the upper portion of the left lung, the inspiratory sounds are harsh, and whistling, and prolonged. On the right, some sibilant and moist ronchi are heard on inspiration, over the region of percussion dullness. The vocal sounds seem to come directly to the ear, through the chest walls, as if they were made immediately beneath the ear. This is the usual quality of the bronchial vocal sounds as distinguished from the laryngeal sounds in health.

You will find the vocal sounds a valuable sign in indicating the presence or absence of pulmonary consolidation, and it is an important point in an examination to be able to tell the degree of consistency of the lungs.

The appreciation of the vocal sounds is very easy to acquire, for in health you can easily distinguish that the voice is formed in the larynx, and it sounds as if it were at a distance, and as if some one else were speaking to you. But in

consolidation of the lungs, because consolidated lung tissue is a better conductor of sound, the voice seems to be made directly under the ear. This is not as good a patient as some, to illustrate this difference between the voice sound in healthy and consolidated lungs, because he has some pulmonary trouble on both sides.

In the majority of cases of phthisis, as you know, the disease first manifests itself at the apex of the left lung, while pneumonia attacks the right. But I think that in laryngeal phthisis the lesion in the majority of cases is in the apex of the right lung, and is usually very limited in extent. The disease in this man is not far advanced, and I doubt if there is yet any excavation in the right lung. The left lung is but slightly involved. He says that when he was traveling in Nebraska, he was accustomed to carry his heavy tools over his right shoulder, and this caused him pain at the time. So he thinks that this might have had some influence in causing his present trouble. I am not prepared to say at present how far this inference may be true.

There is ordinarily pretty high temperature in cases of this kind. But here, on one or two occasions recently, it has been normal in the morning, and ranging between 101°, 102° and 103° in the evening. The emaciation has been rapid, as it always is in continued fevers, and he sweats profusely every night.

Treatment.—The special indication for treatment in most of these cases, is to relieve the local distress. As I told you, these are cases which are often treated for a considerable length of time by specialists in laryngeal diseases, and stimulating or astringent local applications are made to the larynx. But the patient gets no better, and ultimately the discovery is made that the real disease is a pulmonary phthisis. And there is no possibility of curing the ulcers, which may be on the vocal chords, so long as the pulmonary disease exists. The disease itself causes the larynx to become hyper-sensitive and irritable, and I think that this difficulty is often aggravated by the ordinary local applications, so that their employment is unwise. But coughing, talking and deglutition often become very painful, from the irritation and inflammation of the muscles of the larynx, and the relief from suffering which this distress calls for is, I think, the most imperative indication for treatment. This end can best be accomplished by means of opium. It may be administered by the stomach or by hypodermic injection, but it is more successful if used topically, and applied directly to the ulcers in the larynx. This may be accomplished by the insufflation or blowing of morphia powder alone, or combined with bismuth or chalk, directly upon the sores. The operation is simple and easily performed. You may take from $\frac{1}{6}$ to $\frac{1}{4}$ grs. of morphia and mix it with a few grains of powdered chalk, and blow this into the throat by means of an ordinary insufflator, or through a paper tube of the proper size, which you can easily make yourself. This causes the powder to be deposited upon the tender ulcers in the larynx, and the relief is almost instantaneous, and it lasts for some hours. This simple plan of treatment should, therefore, not be neglected.

Phthisis.

Here is another patient, gentlemen, who says that he was taken ill two weeks ago. He admits, however, that he had a cough last winter, which persisted for some time and he then lost his voice, which, he says, he always does when he has a cold. His throat was inflamed at the same time. He was treated for this trouble, and got better, but he still coughed a little during the spring and summer. He does not think he has lost flesh. A few weeks ago he says that he fell down stairs, and this was followed by a hemorrhage from the lungs. Since then his troubles have increased until he came to the hospital.

You see how difficult it sometimes is to get at the beginning of a phthisical disease. For these patients are usually hopeful, and they will not for a long time admit that they are ill. They will sometimes date the beginning of the disease from a recent cold or hemorrhage, but you yourself will often be obliged to date it from the time when they began to lose flesh. And this is a very good point for you to start from, for fever is one of the early phenomena of phthisis, and fever is always attended by emaciation.

Palpation.—There is no marked difference in the expansion of the chest on the two sides, but it seems to be a little freer on the right.

Percussion.—In front, over the apex of the left lung, there is dullness. On the right the pulmonary resonance is increased. The same conditions hold posteriorly, but to a less degree.

Auscultation.—There is prolonged expiration on both sides. The respiratory murmur and the voice-sounds are most distinct on the right, but the latter seem to be made at a distance from the ear.

He seems to have some trouble at the apices of both lungs, but the morbid process is more advanced on the left than on the right side.

Asking the patient to cough is a good means of getting at the effects of a full inspiration. Sometimes it is difficult to get patients to breathe so that you can get any satisfactory information, and this is especially the case with nervous, hysterical and delicate women, as well as men. But if you can get them to coughing, and so make them take several deep inspirations, you may get a good deal of information in this way, which you would fail to get upon the ordinary efforts of the patient.

This man is a good deal better than when he came in, so far as his voice is concerned. His voice is now fair, and this is so far an evidence of the good effect of treatment. But the usual history is that the laryngeal trouble advances *pari passu* with the pulmonary disease; and the treatment of the laryngeal difficulty, in these cases, is usually of no use, unless you treat the phthisis also.

Sanitary Museum of New South Wales.

The Colonial Government are making rapid progress with the organization of a Sanitary Museum of New South Wales, which has been permanently established at Sydney. Arrangements have been made for the shipment of contributions, in the shape of sanitary appliances, from England.

Editorial Department.

Periscope.

The Rapidity of Visual Perception.

The *Lancet* says that M. Charpentier has endeavored to determine (as others have previously done) the interval which elapses between the appearance of a light before the eye and the production of a signal by the subject as soon as the light is perceived. In the course of these experiments, he ascertained whether the interval is the same for the central and peripheral parts of the retina, whether exercise is capable of modifying the duration, and whether such modification produced by exercise is or is not limited to the part exercised. In these experiments, the eye, fixed in the centre of a perimeter, was directed towards the bottom of a large box lined with black, in which a hole was made, a square centimeter in size, opposite a well-lighted window, but usually closed by a black metal plate. This plate was kept in position by an electro-magnet, so that it fell immediately as soon as the circuit was broken, and the interruption was also indicated by an automatic registration on a revolving cylinder. This marked the moment at which the window was exposed. The pressure of a button, the moment the light was seen, re-established the circuit, which was also marked on the registering cylinder. The interval between the interruption and restoration of the circuit, measured by the vibrations of an electric chronograph, indicated the time necessary for the individual to perceive and to signal the light. This perception interval, "personal equation" (which M. Charpentier calls by the somewhat misleading term of "duration of luminous perception"), is found to vary for the same person and under the same conditions, the longest interval being about double the shortest. But the mean of a series—say ten—is found to be the same for the whole period of the experiment. In the case of the author, for instance, with daylight, the average period was found to be .13 sec. The interval varies also in different persons, from .09 sec. to .15 sec. Under normal circumstances the interval is the same for each eye. It is notably augmented by another cerebral occupation imposed on the person during the experiment. If the subject talks, for instance, or listens attentively to a lecture or a conversation, the latent interval may amount to .04 sec. or .06 sec. more than when all his attention is concentrated on the observation. The interval is always greater for indirect than for direct vision, and it is the longer the further the point stimulated is from the centre of the retina. At first the difference is very considerable, amounting to as much as .07 sec.; but it lessens gradually during a long course of experiments, and at the end of six weeks did not in one case exceed .02 sec. The difference cannot, however, be altogether removed by exercise, which also lessens the interval for direct vision. Having ascertained that the interval was the same in each eye, M. Charpentier made, every day during six weeks, fifty observations at two points, one at the centre and another 80° distant from the centre in the outer part of the visual field. At the end of this time he was in a position to appreciate the influence of exercise on these points in the other retina, and also on other points of the two retinæ. The interval attained was for the centre of the left eye .129 sec., and for the unexercised centre of the right eye .143 sec. At the peripheral spot in the left eye an interval of .1 sec. was required, and at the corresponding point in the other eye .210 sec. This exercise had notably lessened the interval at the points used in the left eye. It was interesting to ascertain whether it had had any influence on the points not exercised in this eye. It was found that the interval was similarly lessened for all peripheral points in the outer half of the field, but not for those in the inner half. Hence exercise of one eccentric point seems to influence all points of the same half of the retina, and not those of the other half. More, this influence had extended to the corresponding half of the field of vision of the opposite eye, in which the interval was much shorter than in the non-corresponding half. This can only be explained by admitting the semi-decussation of the optic nerve fibres at the chiasma, and supposing that the exercise influences, not the retina, but the centre which receives the impressions from the corresponding half of each retina. M. Charpentier seems to have attended, in his conclusions, too exclusively to the sensory part of the process which he has measured, since a considerable part of the interval must have been occupied by the motor process involved in giving the signal. It is, therefore, clearly incorrect to speak of the interval as simply the "duration of perception." This consideration, however, brings out a new point of great interest. *A priori*, it might have been expected that exercise would have lessened the interval for the parts of the retina not practiced, although in slighter degree, because the effect of exercise in abbreviating the interval must be supposed to tell upon the motor as well as the sensory portion of the process. But this seems not to be the case. The interval for the non-practiced halves of the retina was not shortened, and hence exercise seems to facilitate chiefly the sensory portion of the process.

The Disease of Inebriety.

Dr. T. D. Crothers thus writes, in the *Medical Annals*:—

Inebriety was recognized as a disease long before insanity was thought to be other than spiritual madness or a possession of the devil. Those who assert that inebriety is always a vice, and that the disease theory is only an "ism" of our times, are merely advertising their ignorance of both the past and present history of the subject. The term inebriety expresses the general disease, of which the excessive use of alcohol is always a symptom. Alcoholism is a term used to designate a special class of symptoms coming

directly from the toxic use of alcohol. Drunkenness may mean or designate any state that follows directly or indirectly from alcohol. It has no definite meaning, and should never be used in scientific parlance. Dipsomania and mithomania are special forms of inebriety, marked by an uncontrollable impulse for alcohol, of limited duration, and with distinct free intervals of sobriety.

Alcohol is not the only cause of inebriety, but in a large number of cases the use of this drug is only a symptom of central nerve degenerations. From conditions more or less unknown, the use of alcohol (or any of its compounds) has been found to relieve some state of exhaustion, and its use afterwards is demanded as positively as food is called for to supply the nutrient wants of the body. The state is similar to that of the neuralgic who finds perfect relief from some form of opium; and this revelation is never forgotten or ignored. In a large proportion of cases alcohol merely explodes diseased states, giving form and direction to what might have been insanity, paralysis, rheumatism, or any of the various forms of diseases of the heart and lungs. From inheritance come all the degrees of exhaustion, feeble powers of resistance and inability to recover from any strain or loss, associated with special tendencies to certain forms of degeneration. Traumatism is another field of cause almost unknown. Psychical traumatism, where the effects of powerful emotions and conditions of nerve trepidation and exhaustion from mental causes are followed by changes and diseased states as clearly traced as tangible lesion of the surface. Every inebriate is suffering from both a physical and psychical disease, beginning from definite causes, and following a regular progressive march, from stage to stage, to either recovery or death. Every inebriate who walks our streets is a more wonderful subject of both pathological and psychological study than any other disease known to science. The range of symptoms crosses and recrosses the mysterious border land of health and disease, sanity and insanity, and often baffles the profoundest intellect to trace its march. Yet in all cases the natural history and outline of progress can be made out, and the general principles of treatment ascertained and applied.

Inebriety is curable in its widest sense. Not by any specifics or class of medicines, appeals to the pride of character or the religious emotions of the patient, or the faith and will power, but by the exact application of physical means suited to the wants of each case, along the line of natural laws. The inebriate is a sick man, and must be studied and treated as such. The causes of inebriety and the many complex forces and influences whose effects are emphatically physical, must be studied for the indications of the form and treatment necessary. To accomplish this the patient must be often quarantined, as in case of yellow fever. All the surroundings and conditions of life must come under the direction of a physician. He must be in an asylum where all the sanitary causes can be effectually removed, of which alcohol may be often an insignificant one. Here the building up process and rest essential to give the natural energies opportunity to become restored can be most effectually carried out. All the means known to science can be gathered and applied in an asylum or home, under the care of a physician, better than elsewhere. Our peculiar civilization is becoming more and more charged with the germ causes of inebriety, and statistics show that it is increasing far in advance of the ratio of growth of the population. The time has come for a general scientific study of this subject by the medical profession, above the superstitious levels of reformers and clergymen's labors. The medical profession should teach what inebriety is, and how to cure and prevent it, and not clergymen and inebriates themselves. It would be equal propriety to trust to clergymen and the views of those who had recovered from typhoid fever for information about the nature and treatment of this disease. Yet there are many physicians who practically endorse the most absurd theories of the nature of inebriety, or stand aloof and sneer at all efforts of every kind to reach this evil. The agitation of churches and societies to find some remedy is an unmistakable evidence of the stage of superstition, of one of the great scientific advances of the century. This is the opportunity for medical and scientific men. A new land, whose mountains, lakes and rivers are all unknown, opens up its mysteries for the pioneer. Already many men all over the world are entering this field. In Germany, last year, over one hundred papers and lectures were published devoted to this study. In France and England over a hundred more were published, treating the subject from the side of science alone. In this country inebriety as a disease is more thoroughly known and understood than in any part of the world. Yet the literature is very imperfect, and, like the study, in its very infancy compared to what it will be in the future. The great central truths upon which all the studies, both past and future, will revolve, are, that inebriety is a disease, and is curable as other diseases are. From this standpoint the profession everywhere is called upon to make accurate clinical studies of cases, and bring out the great laws of inebriety which shall supplant the ignorant dogmatism of enthusiasts and reformers.

Infectiveness of Tubercle.

In the course of an address on this subject, by Dr. William Pirrie (*Lancet*) the following specially interesting points occur. It has been said that one-seventh of all the deaths throughout the world and one-third of the deaths in active middle life are caused by tubercular disease. If this be true it must be all important to be familiar with every addition to our knowledge of this disease. The contagiousness of consumption has not been promulgated for the first time in our day, for Galen believed in its contagiousness, and ordered consumptive patients to inhale the vapors from the crater of Etna, while Morgagni, in his day, was of the same opinion. We read also that this belief has always prevailed in Italy, Spain and other countries of Southern Europe. In 1865 Villimin commenced a series of experiments to show that tubercle was an infective disease, and demonstrated the fact that caseation

of the tuberculous matter was not necessary to make it a focus of infection. Chauveau, of Lyons, obtained like results from all his experiments, which were of three kinds. First, he gave some oxen, by the stomach, portions of tuberculous matter procured in some instances from man and in some from oxen, which are very prone, as a class, to what is known by the names of "pearl disease," "angle berries," or "grapes," from the peculiar condition of the serous membranes, or, generally, bovine tuberculosis; second, he inserted particles of tuberculous matter into the connective tissue; and, third, he injected into the veins water into which tuberculous matter had been placed and had been filtered. In all cases tubercle granulations were found in the lungs, and all the animals contracted tuberculosis.

We may here conveniently mention that Dr. Charles Creighton, in his interesting work on bovine tuberculosis in man, published last year, describes numerous cases in which a condition of organs in the human subject was found similar to that seen in oxen dead of tuberculosis; and he establishes the extreme probability that the disease is not unfrequently transmitted to human beings through eating the flesh or drinking the milk of diseased cows. Professor Gerlach also states that healthy oxen can be infected through the milk of sickly cows, or by taking with their food portions of tuberculous matter from the organs of affected animals. Again, in France, M. Giboux operated on rabbits directly with the air itself expired by consumptive patients, with a view to determine whether it could induce tuberculosis in healthy animals. Into one room he placed a cage containing two healthy rabbits, and into it he passed daily, for some time, twenty or twenty-five litres of air expired by phthisical patients. Into another separated room he placed a second cage also containing two healthy rabbits, and into it he passed daily a similar amount of air expired by consumptives, but previously filtered through tow charged with carbolic acid. The consequences were, that at the end of about three months the rabbits in the first-named cage became emaciated and showed signs of disease, and at death tubercles were found in all the organs, but especially in the lungs; whereas, in the second pair of rabbits there seemed to be no injury to health at the end of a like period, and their organs, when the animals were killed, were found free of tubercles.

We have thus traced a belief in the contagiousness of consumption, held by a few probably in all ages, springing from observation and practical experience; and we have seen how it is justified by the results of experimental research in our own days, and that at last, within the past few months, the precise infecting parasite has been made a subject of microscopic demonstration.

The question now arises, If consumption is an infective disease, can anything be done to destroy its virulence, or to arrest its ravages to a degree hitherto unattained? This much we may safely assert, that the results of all the experiments we have detailed clearly indicate the need of recognizing the parasitic origin of tubercle, of fortifying the body against the inroad, and against all circumstances favorable to the development of the bacilli, as well as of aiming at the destruction of those already pervading the infected organs. With this in view, we must remember the importance of attending carefully to the improvement of the general health of all consumptives; to the avoidance of close confinement in overheated and over-crowded rooms, to the keeping the patient as much as possible in the open air in suitable weather; to the careful ventilation of sleeping apartments and sitting rooms, while guarding against preventable draughts; to the separation of the healthy from the sick as far as possible, at night; and to warning the healthy against all avoidable inhalation of the breath of consumptive patients, who, in their turn, must be kept from re-breathing their own breath. Serious attention should be bestowed also on the disinfection of the sputa of consumptive persons; and much good may be expected also from the more assiduous use of antiseptic inhalations than has been practiced in the past.

Perhaps in all that has been said we may find a plea for cottage hospitals in open, suburban parts, in place of general or large special hospitals, for consumptives; and one, without doubt, for a more careful supervision of the health of cows, whose milk is an article of daily use by the consumptive, and enters so largely into the dietary of all non-consumptives, especially into that of children; as we are told the milk of animals suffering from tubercular disease is capable of transmitting it to previously healthy human beings.

Resection of Carcinomatous Large Intestine.

The Edinburgh *Medical Journal* quotes as follows from Richter, in *Centralb. f. Chirurgie*:—

The patient, aged 33, had been frequently under treatment for stenosis of the intestine (said to be the result of dysentery) situated in the region of the sigmoid flexure, where a firm, cord-like swelling could be felt through the abdominal walls. At length the patient's symptoms became so urgent that immediate operation was resolved on. The abdomen was opened in the linea alba, the distended small intestines, wrapped in disinfected cloths, were drawn to one side, and the stricture, seated a little above the sigmoid flexure, was exposed. The affected intestine, drawn well forward, was divided by a transverse incision immediately above the point of stricture, and a large quantity of very offensive, tenacious, fluid fecal matter was evacuated; but in spite of this the distention of the small intestines was scarcely diminished. The gut was then punctured in several places with a trocar, the gas and feces expressed, and the punctures closed with catgut sutures. The portion of intestine which had been drawn forward was then disinfected and replaced *in situ* above the stricture. The lower end of the colon was kept closed during the operation, by the fingers of an assistant. Three inches of the strictured portion of the gut were then excised, and the upper tube was joined to the lower by means of Czerny's suture. The short mesentery was treated in a similar manner. The point of union was then fixed opposite the inferior extremity of the wound, in

the parietes, which was left unsutured in its inferior fourth. Finally, a Lister's dressing was applied. Duration of the operation, three hours. On examination the stricture was found to be cancerous. A small stool was passed only a few hours after the operation; but on the eighth day, fæces and flatus escaping through the wound, the Lister's dressing was abandoned and open treatment adopted. Gradually the stools began to pass *per vias naturales*, and by April 19th, or fifty-four days after the operation, the patient was able to spend the greater part of the day out of bed, although for a month more there was an evening rise of temperature. The fistula at last healed under applications of the thermo cautery and argenti nitras. On October 19th the patient was dismissed strong and well. Köhler considers that resection is preferable to colotomy in all cases where the disease has not extensively involved neighboring structures, or where the patient's strength is not so reduced that this severe operation cannot be safely performed. Von Erckelen's researches show that life was prolonged in 62 per cent. of the published cases of colotomy; but, of course, the focus of disease was not thereby removed, and there was no thought of a radical cure. Such a cure is, however, much more likely after extirpation, for the growth rarely infects the lymphatic glands, and is but little prone to metastatic formation or recurrence. Besides, this method renders the objectionable artificial anus unnecessary. Up to the present time eighteen out of twenty-five cases of completed resection of the large intestine have taken a favorable course. In three of these the disease has recurred with a fatal result; but the remaining fifteen, *i. e.* sixty per cent. of all those operated upon, seem to be perfectly cured. As regards operative details, Köhler recommends that the abdominal incision be made in the linea alba, arrest of hemorrhage being thus facilitated and a good view of the parts obtained. During the operation the divided end of the intestine is to be kept closed by the hand of an assistant, while, if possible, the piece to be resected and the adjacent healthy part are drawn beyond the abdominal wall, so that an escape of intestinal contents may not take place into the peritoneal cavity. Finally, he recommends that, as in the case above described, the sutured intestine should be fixed opposite the lower end of the wound in the abdomen.

Crural Neuralgia Among Dentists.

Dr. J. B. Sutton makes the following curious observation in the *Lancet*:—

On June 20th I was called to a gentleman said to be suffering severely from sciatica. The patient was resting on his right side, complaining of intense pain in the left loin, radiating thence along the outer and anterior aspect of the left thigh whenever he attempted to move. Firm pressure, applied between tuberosity of ischium and great trochanter of femur was painless, but the instant one touched the skin immediately over the erector spinæ muscle severe pain was evoked, extending down the thigh to the knee-joint, mapping out exactly the course of the anterior crural and external cutaneous nerves. Pressure over the points of exit of the second, third and fourth lumbar nerves from the spinal canal caused excessive pain. The nerves at fault were clearly the second, third and fourth lumbar, the hyperæsthetic area in the loin clearly corresponding to the distribution of the posterior divisions of these nerve trunks. The case was obviously not one of sciatica, but crural neuralgia, having a very unusual distribution; the ordinary forms of this disease extend to the foot and toes of the affected leg. Belladonna and aconite were applied locally, strychnia internally; the patient was convalescent in seven days.

Two days later a similar case came under my notice, and a third has been reported to me with exactly similar symptoms. Curiously enough, the three patients were dentists, engaged in the active duties of their profession. It appears exceedingly probable that this painful affection may be explained by the fact that when dentists operate they always stand at the right side of the patient, consequently, when manipulating cavities in teeth difficult of access it is necessary to throw themselves into a constrained attitude, whereby the lumbar vertebræ are slightly flexed anteriorly, but flexed laterally to a considerable degree. It is necessary, sometimes, to maintain this cramped position for long periods, the temporary distortion being even more exaggerated when the dental engine is being used. These combined flexions cause the lumbar nerves to become congested, irritated, and possibly injuriously nipped as they pass through the intervertebral foramina, thus giving rise to the symptoms detailed above.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received a corrected copy of the address entitled "The Genius of Medicine," which we noticed some time since.

——It is always elevating, instructive and entertaining to read the lives of great and good men. No better reading can be placed in the hands of the young and growing generation than the records of the trials and achievements of the good men who have gone before. Thus do we feel when we read the "Life of John M. Briggs, of Bowling Green, Ky.," by W. K. Bowling, M.D., which we have received in the form of a reprint from the Nashville *Journal of Medicine and Surgery*. July, 1882.

——Dr. John M. Keating, of Philadelphia, has added to our knowledge of the parasitical nature of disease, by the discovery of micrococci in the blood of malignant measles. He failed to find them in ordinary, simple cases. Noting that alcohol most readily checked the develop-

ment of micrococci in culture solutions obtained from erysipelas, diphtheria, etc., whisky was relied on as the sheet anchor in the treatment of these cases, with most gratifying results. His experience is set forth in full in a reprint from the Philadelphia *Medical Times* of June 7, 1882.

——"A Successful Ovariotomy in 1866," is the title of an article by Dr. Robert Newman, a reprint of which, from the *New England Medical Monthly*, we have received. Sixteen years ago ovariotomy was comparatively an unusual operation, and a successful case then possessed much interest to the pioneer physicians who were trespassing upon the hitherto dreaded and feared borders of peritoneal surgery; to-day successful ovariotomies are so common that they are accepted almost as ordinary operations, so that this report possesses more historical than practical interest.

——The "Transactions of the Medical Society of the State of Michigan," for the year 1882, contains very much of interest and value, notably the "History of two cases of mal-presentation," by Dr. E. P. Christian, of Wyandotte; "Optic Neuritis," by Dr. Leartus Connor, of Detroit; "Antisepsis in the Treatment of Disease," by Dr. D. W. C. Wade, of Holly; and "Urinary Deposits," by Dr. Julius A. Post, of Lansing. All of the papers are very good, but in an especial manner would we desire to call attention to the two following: "The Insanity of Masturbation," by Dr. C. B. Burr, of Pontiac; and "The Legal Responsibility of Surgeons for Ununited Fractures," by Dr. Foster Pratt, of Kalamazoo. Limited space prevents us giving any abstracts from them, but we should advise all interested in the subjects to procure and read them.

——"The Antiseptic Treatment of Wounds after Operations and Injuries," by W. T. Briggs, M.D., a reprint from the Nashville *Journal of Medicine and Surgery*, is a timely contribution to medical literature. In this day, when the father of asepticism is being doubted, his statements twisted and his conclusions denied, it is well that we should have a clear exposition of all that pertains to this very important subject. The author sums up the contents of his paper as follows:—

1st. The germ theory of wound infection is not established.

2d. The antiseptic treatment of wounds after operations and injuries is not limited to Listerism nor to any other special method, but is based upon broad, general principles.

3d. Antiseptic surgery embraces every condition or agent that tends to prevent putrefactive changes in wounds, or to remove or neutralize the effects of such changes when they have occurred.

4th. All wounds are healed by reparative inflammation.

5th. All wound accidents are the result, either directly or indirectly, of destructive inflammation.

6th. The antiseptic treatment of wounds, properly considered, consists, first, of such means as will restrain inflammatory action within reparative bounds; and second, of such means as will subdue excessive action and remove or neutralize the effects of destructive inflammation.

BOOK NOTICES.

A Treatise on the Practice of Medicine, or the Pathology and Therapeutics of Internal Diseases. By Alonzo B. Palmer, M.D., LL.D., etc. Vol. ii. New York: G. P. Putnam's Sons. 8vo. pp. 864. Price, cloth, $5.00.

The present volume of Dr. Palmer's *Practice* includes diseases of the respiratory organs, of the heart, of the urinary apparatus, of the brain and nervous system and parasitic diseases. It is written in his usual clear and forcible style, and although the arrangement is strictly didactic, it is possible to read a good deal that he writes without fatigue. Speaking from long personal observation, he has formed independent views of treatment, and as they have been the result of actual practice in our own country, they are vastly more worth regarding than those of foreign authors, or than that spurious article of home production which is derived from the perusal of foreign books, and an endeavor to apply their systems to this country.

Dr. Palmer takes occasion in this volume to reiterate his well known confidence that a full dose of quinine and opium will abort pneumonia, if administered in the early stage. He considers it safer and surer than blood-letting, and without the possible dangers of the latter.

The question of the use of alcohol as a prophylactic in phthisis is discussed at length and answered in the negative. But the discussion does not seem to us wholly ingenuous. Nobody claims that drunkards, out-and-out sots, are particularly free from phthisis. Their exposures are too numerous and reckless. Yet this is the class that Dr. Palmer seems to have in his eye. The contention of the affirmative is that the moderate and regular use of alcohol is a preventive. This he does not fairly meet.

In cases of insolation he recommends cold water and morphine. He also speaks well of quinine. The mortality he places as high as 40 or 50 per cent. This is only true of the severe cases during extreme heat in the great cities. In country districts it is much less.

We have no doubt Dr. Palmer's work will be well received by the profession. It is judiciously prepared and fully merits a good share of popularity.

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HINTS CONCERNING MEDICAL LEGISLATION.

At the various meetings of medical societies during the summer months suggestions for medical legislation are brought before the profession, and these are usually referred to a committee for action during the winter, when the Assemblies of the different States are in session. Medical bills for the regulation of the profession itself and for the establishment of Boards of Health should be introduced into the Legislature of every State where such acts are not already in force. It is nothing less than a disgrace to any Commonwealth not to have these acts on its statute books.

There is, however, an extraordinary apathy among Assemblymen as to any bill concerning doctors or the public health. They suspect either that such bills spring from the rivalry of schools of practice, or else that their chief object is "to give some doctor a job." They are slow to recognize the fact that a doctor honestly desires an improvement in the general health of a community. They ask how it is that he wants to cut down his business in that way, and they are incredulous when they are told that it is a purpose of the physician's life to prevent people falling ill.

Another cause of their lethargy is that necessarily such bills have "nothing in them," as the legislative phrase is, which means that they involve no monied interest, and that there is no cash to be paid out for "log-rolling."

These difficulties stand in the way of all medical legislation, and consequently it is no easy matter to carry a bill through the two houses. While not often actually opposed, there is a vast *vis inertiæ* to be overcome, and it is worth while to consider carefully how best to accomplish this.

It is, of course, easy to have any bill presented and referred. The struggle is first in the Committee and next in the House. Those who have the bill in charge will, it is presumed, be carefully prepared to state to the Committee its merits, and the urgency of its adoption. They can generally have it called up by persistently boring the chairman, or by securing any member of the committee as an earnest advocate of it. The objections and questions of the other members can generally be foreseen and readily answered. A physician speaks with a certain degree of authority on matters relating to his own vocation, and it is rare that a Committee, if fairly satisfied, decline to report such a bill favorably.

The real struggle is in the House, and for this the preparation must be made far in advance. As politicians say, we must there "fish with a long pole." As soon as a medical society has decided to apply for legislation, the persons who are appointed to work for it should print the proposed bill in full, and *write* to one or more leading physicians in every legislative district of the State to interview their representative, and explain the bill to him. We say *write* to these physicians, because a *printed* request of that kind is waste paper. It is considerable trouble for a busy practitioner to interview a politician, and to ask such aid as that deserves a written letter.

It should be particularly requested, in that

letter, that prospective opposition be reported, and the criticisms of the bill be mentioned.

In this manner, nearly every member of the legislature will know what the bill is, and, moreover, he will know, from home authority, in whom he can trust, that it is an honest and a useful measure.

It may be said that this entails a great deal of work. So it does. So does success anywhere. The man who thinks the game will not pay for the candle, is not the man to be put in charge of the measure. And if no man is found ready to take pains to conduct the affair rightly, the matter had better be dropped until such a hero appears.

The chief reasons of the failure of a medical bill are either that the instrument is badly drawn, or that those who have it in charge trust to its intrinsic merits, and do not take the trouble to smooth the road for its adoption.

DISGUISED SYPHILIS.

Every wide-awake physician who desires to be successful in his warfare against disease, must ever be on his guard, and be always on the lookout for what we call disguised syphilis. We mean *disguised* on account of the moral character of the patient. It will be wrong, and many an innocent person will be unjustly condemned and improperly treated if the general practitioner views all his patients through the venereal spectacles of the professional syphilologist. We do not mean to advise this; far from it. But what we do desire is to call attention to the well known fact that syphilis is capable of transmission from one to another in many other ways than by sexual intercourse, and that therefore the physician should be always on the lookout for it, in order that he may intelligently treat and cure it. That syphilis is curable, is also now a pretty generally accepted belief. Again, there are few diseases that present to us such a variety of symptoms, and that are, therefore, so likely to be confounded with other diseased conditions. To make our advice clear we will relate a case from actual life.

A married lady, of altogether unimpeachable character, whose husband enjoyed the same distinction beyond the slightest possibility of doubt, and who had been married ten years, and given birth to three splendid children, is the central figure in our story. She was about two months pregnant when she received into her family a young female relative, who had been brought up in Germany (where, if rumor be true, and this girl's statement can be relied upon, morality must be at a very low ebb), and, whose mother having died, was, for some months before coming to America, her own mistress. She was naturally a vain, precocious girl, with lax ideas of modesty and morality, though there was not in her behavior sufficient grounds for accusing her of indulgence in sinful pleasures. Soon after her entrance into this family a lupus-like eruption occurred on her scalp, which she said she must have caught on shipboard, and added "that it was nothing; that *nearly every one* in Germany had it." Her head was in a frightful condition, and this good lady, in her charity, undertook to wash and dress it, having no suspicion of the risk she incurred, for we verily believe that she had never even heard of such a word as syphilis.

For a time all went well. After a few weeks this lady noticed that a *pin scratch* on her finger, instead of healing, became inflamed and angry looking, and in a short time a nut-like swelling appeared on the inner aspect of the elbow. She began to lose flesh, her appetite failed, her *throat became sore*, she became nervous, sleepless, and suffered from headache, became short of breath, suffered from palpitation of the heart and great weakness, and albumen and phosphates appeared in the urine. Her condition, so much more terrible than in any previous pregnancy, alarmed her, and she sought medical advice. She told her physician the history we have given, and stated that she herself thought she had been exposed to *blood poisoning*, that convenient and indefinite pathological condition. The doctor had some suspicion that she might be suffering from syphilis, but owing to her pregnancy was fearful to prescribe specifics, and so contented himself with ordering tonic treatment. She grew daily worse,

until fears were entertained for her sanity, so dreadfully exhausted was her nervous system. It was then resolved to resort to anti-syphilitic treatment. It had now been five months since she was inoculated. Biniodide of mercury ($\frac{1}{8}$ gr. doses) and iodide of potassium (10 grs.) thrice daily, were ordered. Scarcely had she begun this treatment when she commenced to improve, and after two weeks she was like a different woman. She was then put upon tonic treatment, and in three weeks from the beginning of the specifics she expressed herself as well; she had neither ache nor pain, appetite enormous and sleep excellent and refreshing, thus clearly demonstrating the nature of the *blood poisoning*.

You now know what we mean by *disguised syphilis*. There was no earthly reason to suspect this lady of having the disease, except the two facts, 1st, of her occupation when she was taken sick, and, 2d, that she did not improve under what seemed appropriate treatment. When carefully watched mercury is not a dangerous drug; therefore, whenever you have good ground to suspect disguised syphilis do not fear to use it, but be very sure that your grounds for suspicion are good. Remember, as we have said, that syphilis is capable of transmission in innumerable ways, and that therefore you are likely to encounter it in the most unlikely persons. Whenever you meet a case that presents any of the symptoms of syphilis, no matter how irregular or obscure they may be, if you cannot account for them in any other way, let your suspicions be directed toward syphilis, and by using judgment endeavor to make an accurate opinion, without allowing the patient to have any idea of your suspicion. By neglecting this last advice you may entail a lifetime of misery on those who do not deserve it. The lady of whom we have told you has not the slightest suspicion of the true nature of her disease, thank God, and neither has her husband. Therefore, again we advise you, be ever *prudently* on the watch for disguised syphilis, and we warrant that you will find it oftener than you now dream of, and that many obstinate cases which have caused you to fret and worry will recover like magic.

COUNTER-IRRITATION.

Of all therapeutic measures, there is probably no single one so universal, and so potent in its application, as counter-irritation. The disputed point, as to whether it produces its results through the agency of the nervous or the circulatory system, has no practical interest for the busy physician. He has but little time for theories or physiological experimentation, what he most desires are facts and results. In counter-irritation he has them both; it *can* cure, and it *does* cure. It matters but little in kind, but greatly in degree, what counter-irritant is used. When we desire a profound impression, as in the initial stage of asthenic pleurisy, nothing short of a fly blister, and a big one at that, one that will cover the whole affected side, will do any good. A mustard plaster, under such circumstances, will be like a child playing at war, as compared with real battle. Whereas, when we meet an asthenic type of the same disease in a weakly and debilitated individual, the violent fly blister would be too powerful, and resort must be had to the gentler mustard. Much undeserved odium has been cast upon counter-irritation, as upon many other therapeutic measures, because of inferiority in quality of the article used. We have used half an ounce of cantharidal collodion with the result of merely soiling the part to which it was applied, it did not even *redden* the skin, while half a drachm of a good article, applied to the same part, on the same person, blistered most terribly.

Many object to counter-irritation of a severe character, on the ground that it produces an external sore that is sometimes very hard to heal. That this is true no one can doubt. It does sometimes happen that very tedious and painful abrasions of the skin, or sores, do result from fly blisters or tincture of iodine, or some other equally powerful counter-irritant. But these are the exceptions, and ought not to militate against the rule, which is, that this form of treatment is an exceedingly valuable one in nearly all affections of an inflammatory nature. A large volume could be written on the different counter-irritants and the great value of counter-irritation, but it is

not our purpose to do more than merely call your attention to the matter. Every physician must wisely judge what cases are suitable for this form of treatment and what articles are appropriate to the effect desired. But remember, that while it will be all very well to resort to internal medication, counter-irritation *can do no serious* harm, and it will oftentimes amazingly aid the action of your drugs.

Notes and Comments.

The Contagiousness of Pulmonary Consumption.

Dr. Herbert Davies, consulting physician to the London Hospital, and to the Royal Hospital for Diseases of the Chest, writes to a recent number of the *British Medical Journal*, giving some strong arguments against the contagious properties of pulmonary consumption. He quotes from a letter, written in 1867, by Mr. Edwards (resident medical officer of the Brompton Hospital for seventeen years), to Dr. R. Payne Cotton, in which he says that he remembers fifty-nine resident medical assistants, whose duration of office has averaged six months, all but two of whom are living, one dying from aneurism, and the other from some unknown cause. The present chaplain has held office for seventeen years, and his two predecessors are living. The matron has been resident for more than sixteen years, and the two former matrons are living. Of the nurses now in residence, one has been here 24 years; two, 12 years; one, eight years, one 7, one 6½, and one 5 years. No under-nurse has died of phthisis. The head nurses sleep each in a room containing fifty patients, and two only are known to have died—one from apoplexy; and one, some time after she had left the hospital, and after an unhappy married life, of phthisis. All but two of the physicians who have attended the in and out-patients during seventeen years are living. One died from causes unknown, the other from causes unconnected with diseases of the lung.

Intestinal Obstruction Relieved by Puncture of Bowel.

Dr. James C. Worthington reports, in the *British Medical Journal*, the case of a man, age 28, who had been seized, two days before his admission into the hospital, with agonizing pains in the region of the navel, accompanied with sickness, which became stercoraceous the next day. Opium afforded a little relief. He took a strong purgative draught, which was followed by sudden increase of pain and stercoraceous vomiting. Upon admission he lay on his back, with both legs drawn up, tossing from side to side, countenance pale and anxious, tongue coated, skin clammy. Had passed no urine since previous day. Pulse 76, Temp. 99.8°. Laudanum in large doses, and a few sniffs of chloroform, gave temporary relief. Three pints of warm water was injected into the bowel. Some of it was retained, and that which returned was hardly discolored, and contained but a few floating bits of hard fæces. Warm fomentations were applied, and laudanum, q. s. to control pain, ordered. The next day he passed a small amount of highly concentrated urine. No return of sickness. Four days afterwards he seemed so much worse that it was decided to puncture the bowel at a point where it was much distended and tympanitic. A medium-sized aspirating needle was introduced, which let off a large quantity of flatus, with immediate relief. After a while fluid, similar to that vomited, began to escape through the tube, which was kept in position for half an hour. It was then rapidly withdrawn, and lint, plaster and a bandage applied. The patient at once said he felt greatly relieved. In the evening the temperature rose to 100.2°. During the night he had two fluid stools. He made an uninterrupted recovery, and when discharged, a week afterwards, a small, indirect inguinal hernia, on the right side, showed itself, for the first time.

Resorption in the Stomach.

Dr. H. Tappeiner has communicated to the *Zeitsch. f. Biolog.*, xvi, p. 497, the result of his experiments on dogs, etc., regarding the power of resorption exercised by the stomach. He put a ligature around the pylorus, and introduced through an œsophagus-tube solutions, the contents of which quantitatively and qualitatively were known. He found that of watery solutions of glucose, sulphate of sodium, taurin, peptone, and strychnia very little was resorbed.

But if he took alcoholic solutions, the result was quite a different one. Far more was absorbed than left in the stomach, and while, for instance, the effect of a watery solution of strychnia became only very gradually apparent, and in a mild degree, the same quantity of strychnia in an alcoholic solution, caused, within ten minutes, the death of the animal.

The effect was, however, not uniform, and he observed that the rapidity and the quantity in

these absorption processes depended, to a great degree, upon the quantity of fluid previously in the stomach. With the pylorus closed, watery solutions of chloral had very little effect, while alcoholic solution caused sleep within a few minutes. Of the alcohol, always three-fourths was absorbed.

This gives us an indication for the diet of persons suffering from cancer of the pylorus, or of induration and narrowing of this orifice, due to other morbid leisons. The nutritive material should be given in alcoholic solutions, and very little at a time, so that there is never much fluid at any one time in the stomach, and, for that matter, very little solid material also. All medicines, in such cases, should be administered, dissolved in alcohol.

Some Observations on Consumption.

Dr. William H. Pearse, in the course of some observations in the *Medical Times and Gazette*, says that he is being continually struck with the phenomenon that in the phthisical, the upper maxillary and nasal bones have an exaggerated tendency to one or the other side. In twenty-four cases to the left and in thirty four to the right. Where the obliquity was to the right, the right lung was diseased in sixteen cases, the left lung in eighteen. In those in which both lungs were diseased four had the obliquity to the right and one to the left side. He does not offer an explanation.

He has often noticed, among the poorer classes who are phthisical, a flattening of the face across the root of the nose. One tall young woman with infraclavicular regions much sunken, and who has been under observation during two years, but in whose lungs no disease can be traced, has a prognothic face, with teeth of negro type.

Sometimes the end of the nose is lumpy in proportion to the organ; in others, abnormally pointed; in others the terminal cartilages are large and unsymmetrical. He has on many occasions been able to predicate phthisis from the unsymmetrical and rather large terminal carti lages of the nose.

Often in the phthisical the head and neck are not well set up, but the neck, leaning somewhat forward, is at the same time sunk down, as it were, between the shoulders.

Correlation exists between the hands and phthisis; while some have exquisitely fine hands, a large proportion have unduly large hands. One may often predicate phthisis from the large and cold hands.

The body in some cases will develop into that of a fine young man or woman, the thorax remaining that of a child.

Syphilis Conveyed by Skin-Grafts.

The *Lancet* says that another case in which syphilis was conveyed by skin grafts is reported in Paris, by M. Féréol. It occurred in the practice of M. Deubel; the patient was a man, aged forty-nine, who had not had any venereal affection, and who had a large wound caused by erysipelas, with sloughing. Seventy-five dermo-epidermic grafts were put on, nearly all of which "took," and cicatrization was rapidly effected. A month after the application of the first grafts the cicatrix began to ulcerate in several places. Six weeks later an abundant roseolous eruption broke out over the body, and a month later mucous patches appeared in the mouth. One of the sons of the man, who had furnished grafts on each occasion, then consulted M. Deubel for mucous patches about the anus, and stated that eighteen months previously he had had a hard chancre, for which he had not had any treatment. The case is apparently beyond all doubt, and shows the necessity for caution in the selection of persons from whom grafts are taken. The safest rule to follow is, wherever possible, to take the grafts from the person on whom they are to be implanted.

Elephantiasis of the Vulva.

The following interesting case, which occurred in the Goculdas Tejpal Hospital, has been recorded in the *Lancet*:—

A Hindoo woman, aged thirty years, presented a most unsightly elephantoid tumor in the left labium, which extended downward into the perineum. In the right labium there was a smaller tumor, about the size of an orange and unconnected with the first. The incision to remove the tumor on the left side extended from the mons Veneris to the end of the perineum, and was carried on the inner side through the mucous membrane on the inner surface of the labium. The incision on the outer side extended to the left groin and margin of the thigh; and when the mass, which weighed about five pounds, was removed, a most unsightly gaping wound was left There was very little hemorrhage, and slight torsion was found sufficient to arrest that in the three small vessels severed. The smaller tumor on the right was now removed, and the edges of the wound were brought together without any trouble. To effect healing of the first

wound the legs had to be brought together and the thighs tied firmly by a broad bandage. Three or four wire sutures were put in, by which the mucous membrane of the vagina and the outer integument were connected. This position, however, was more relied on to assist the healing process than anything else, and she was so kept, with the legs tied together, for over three weeks. It was most remarkable how the parts began to assume their natural shape as the healing process went on. The surface had altogether healed over five weeks after the operation, when the patient was removed by her husband.

Rider's Sprain.

In the *Lancet*, Dr. Henry A. Morris calls attention to a form of accident which is commonly found among riders, and which consists in a rupture of some of the fibres of one of the adductor muscles, generally the adductor longus. The accident generally happens to hunting men, is more frequent in tall men, and affects the right thigh more frequently than the left. It is usually caused by the horseman suddenly making a strong grip, owing to his horse rearing, shying, slipping, or unexpectedly taking a jump, by which means the adductors are suddenly brought into forcible action. The pain at the time is often trivial, not causing the horseman to dismount; but subsequently more pain is felt in walking; rather severe pain attends the act of mounting, and unbearable pain is caused by gripping the horse. Time and rest will, of course, cure the greater number of these cases, but, in addition, a broad elastic bandage firmly applied over the upper part of the thigh, and secured by a figure-of 8 turn round the waist is of every material assistance at first, in locomotion.

Hydronephrosis, Abscess.

In a woman, aged sixty, a tumor of the size of a child's head was at different times observed to reappear and disappear in the right side of the abdomen. The case is reported by Dr. Landau, in the *Arch. f. Klin. Chirurg.*, xxvi, p. 776. A trial-puncture was first made; the fluid discharged was found to be rich in cholesterin. A second one resulted differently, as now in the fluid were noted, besides a large quantity of urea, traces of uric acid. The fluid the second time was opaque. The radical operation was then made, and it was observed, that besides the pyonephrosis, into which (on account of want of antiseptic precautions?) the original hydronephrosis had been changed, there existed a perinephritic abscess, which had to be opened and so brought in direct communication with the wound in the kidney, the latter certainly being a floating one. The final result, however, was favorable; undoubtedly better than when, under these circumstances, the floating kidney should have been extirpated.

In connection with this we wish to draw the attention of our readers to the deplorable negligence with which often a trocar is used. We read, that occasionally after paracentesis peritonitis has followed; that a pleuritic serous exudation after thoracentesis changed into empyema, and that even the tapping of a hydrocele brought on an attack of erysipelas. If the trocar in these cases had been examined, it would have been found full of bacteria. Such an instrument should be placed for ten minutes at least in a carbolic acid solution (gr. vj to ℥j water, never oil or alcohol, as that gives an inert fluid), and the whole procedure should be made, as much as possible, under antiseptic precautions. Then such accidents as the above cannot happen.

Treatment of Obstinate Vomiting.

In the course of an article on this subject, in the Boston *Medical and Surgical Journal*, Dr. S. G. Webber says: Often the best method of treating this complication is to give the stomach rest. Sometimes only a large amount of food taken at one time excites vomiting: then it is sufficient to resort to frequent feeding, giving a very small quantity each time, a mouthful, or a spoonful every fifteen or thirty minutes; thus the stomach never contains a large mass of food requiring considerable muscular exertion to roll it about, and by its weight or bulk exciting the reflex irritability of the nerve centres. Many times, however, this is not enough; the stomach requires more complete rest, and the best treatment is to withhold all food and medicine; sometimes a few hours' rest is enough, again it requires two or three days; then it will be necessary to use nutrient enemata. Where there has been much vomiting thirst may be very annoying to the patient; small lumps of ice held in the mouth will relieve this, and generally do not cause vomiting. After the stomach has had sufficient rest it is best to commence feeding by the mouth, with caution, giving a little frequently. Milk and lime water, equal parts, a teaspoonful every half hour, should be first tried; if well borne the amount can be increased gradually. It is a mistake to increase the quantity too rapidly.

Precautions against Puerperal Fever.

Dr. H. G. Sworn writes to the *Lancet* as follows:—

On July 31st, I was called to see the child of Mrs. M. On arrival I found the child suffering from scarlet fever. At the same time I was requested to see an aunt of the child, who was ill, and whom I found suffering from scarlet fever also. Noticing that the mother was pregnant, and to all appearances in an advanced stage, I strongly advised the immediate removal of both the patients. The mother, however, would not hear of the child being removed, but allowed her sister to be taken to the hospital, where she remains at the present time, having had a severe attack, her throat being much affected. The child subsequently skinned very freely. On August 5th the mother was taken with labor pains, and was delivered of a child at 6 P.M., in the same room in which the child was, there being no other room in which to isolate the case. I had the woman placed between sheets impregnated with carbolic acid as soon as labor set in; and in place of using lard to lubricate the fingers for making examinations, carbolized oil was employed. All the napkins used then and subsequently were saturated with the same. The case progressed favorably, no bad symptoms intervening. It would be interesting to hear more on this subject.

Night Terrors in Children.

In a thesis presented before the Paris Faculty in 1881, M. Debacker follows M. Lasègue's classification, and divides the nocturnal hallucinations of children into two grand classes: hallucinations of non-cerebral origin, and hallucinations of cerebral origin. The first, occurring only during a short period of time, and not of gravity, depend oftenest on gastro-intestinal derangement, on indigestion, obstinate constipation, the presence of worms in the intestines, or on laborious dentition. In some cases they represent a form of delirium due to inanition in the period of convalescence from acute diseases, or in the exhausted condition induced by excessive fatigue, masturbation, or some chronic affections.

They are in other cases produced by the action of toxic agents, such as alcohol, lead, belladonna, etc.; or by other diverse causes: fear at being alone in the dark, terrifying stories, or even by the irritation induced by prurigo, the itch, or the presence of pediculi.

The grave and persistent hallucinations of cerebral origin depend, 1st, on brain affections to come, such as tuberculous meningitis, chronic hydrocephalus, idiocy, epilepsy, etc.; 2d, on cerebral troubles already present, as idiocy, delirium of persecutions, and dementia of childhood. The author cites numerous examples of the diverse forms of hallucinations he mentions.

Unity of Poison in Scarlet Fever, Etc.

In the Glasgow *Medical Journal*, for August, 1882, Dr. G. De Gorrequer Griffith publishes a lengthy, interesting and logical article on the unity of poison in scarlet, typhoid and puerperal fevers, diphtheria, sore throats and certain allied ailments, and many other affections heretofore usually considered to be separate and entirely distinct diseases. Numerous illustrations are given, like the following: "I have seen cases intermediate between scarlatina and variola, and have known diphtheria in children give rise to scarlatina in the mother." The whole substance of his theory can be summed up in his closing paragraph: "I have many other affirmative proofs and expressions of opinion which I will not here quote, and will conclude with this axiom: 'by unity of poison is meant not that the poison is always the same; but that the one poison—the one *origo mali*—whatever it may be, will originate several so-called different affections.'"

Double Suicides.

In a recent issue, the *Lancet* assumes that where two persons conspire together to kill each other, or to destroy their several lives simultaneously, it is simply absurd to suppose that they are insane. In making this statement, they are not unmindful of the cases of double insanity and double suicide that have been recorded, but consider that a closer scrutiny would result in classifying them as instances of murder and suicide.

Facial Spasm (Tic convulsif.

Dr. M. Bernhardt reports, in the *Zeitschr. f. Klin. Med.*, III, 1, a number of cases of spasm of the facial nerve and its branches—tic convulsif—and remarks that, with the exception of a few cases, in which it was increased, the electric excitability of the nerves as well as of the muscles of the affected side of the face were found by him to be normal. All electro therapeutic applications, even the method recently recommended by Berger (*Centralbl.*, 1880, p. 314), the application of the anode of a moderately strong, constant current over the temporal bone

of the side opposite the seat of the affection, cause very little improvement, if any. In the two cases in whom the nerve has been stretched, relapses occurred. Subsequently, in one of the cases, the patient had to be cured of paralysis following the stretching. Bernhardt cautions against further mutilation of the motor nerve, as contractions, spasms and choreic motions were almost a physiological occurrence after grave rheumatic or traumatic paralysis of the facial nerve, and that nobody should be astonished, therefore, if after artificially produced palsy during the process of regeneration the same symptoms made their appearance.

Excision of the Pylorus.

The *Medical Times and Gazette* says that Dr. Van Kleef, of the Hospital de Calvaire, Mæstricht, relates, in the *Presse Méd. Belge*, July 23, the case of a woman, aged thirty-seven, upon whom he performed excision of the pylorus on account of stenosis, supervening on ulcer of the stomach attended with severe hæmatemesis. She had become greatly reduced in strength, and for some time past had been fed by the rectum. The indurated pylorus, when removed, measured 4½ by 5 centimeters, and a quill could scarcely be introduced into its aperture. The stenosis was due to cicatricial tissue, no sign of carcinoma being present. The operation lasted two hours, and an hour or two elapsed before the patient began to awake from the anæsthetic condition. Her recovery from the state of anæmia was slow but progressive, and two months after the operation she was able to leave the hospital, weighing 39 kilograms. At the date of the report, about six months after the operation, she weighed 45 kilos.

Tuberculosis.

Dr. Kammerer, Imperial Health Officer to the city of Vienna, has published an important address to the magistrates of that city on the dangers which threaten the health and life of the population, through animals affected with tuberculosis. The victims are insidiously struck down, says Dr. Kammerer, through two of the most important articles of daily diet—milk and meat. The milk of cows with tuberculosis acts as an unconscious inoculation upon adults and children who partake of it, and in the case of the latter, the seed of tuberculosis is being imperceptibly sown among thousands in the great towns. Dr. Kammerer regards infection by this channel as being quite as fruitful a source of the disease among the young as hereditary taint, to which it is usually traced. He regards it as exceedingly doubtful whether boiling or roasting ever can effectually eradicate the germs of infection from the flesh of tuberculous animals.

Treatment of Angina Pectoris.

According to the *Medical Press and Circular*, Dr. A. Mühlberger, of Herrenalt, believes that in concussion we have an excellent means of keeping in check the violence and duration of the sterno-cardiac attacks. He further notes that kneading and rubbing have long been tried and approved remedies against muscular cramp, and that as angina pectoris is nothing more or less than cramp of the cardiac muscle, it seemed to him likely a similar result would be obtained in parallel cases by the like means.

He finally sounds a note of not unheeded warning in the *Deutsch. Med. Zeitung*, against the too bold use of remedies in this affection, and we may add in others also, and recalls the case of an elderly medical man who was relieved of his angina only to die of the morphia that procured the relief.

Coca to Assuage Thirst.

Surgeon Major T. Edmonston Charles, M.D., of H.M. Indian Army, Honorary Surgeon to the Viceroy, writing in the *Medical Times and Gazette*, recommends, in the strongest terms, the chewing of coca *leaves* to relieve thirst when one is deprived of water. He speaks from considerable experience, and evidences no hesitation in expressing a very positive opinion. "It is the leaf alone that is a thirst-assuager, and no preparation of the drug should therefore be purchased to supplement the leaves. For other medicinal uses the wine may be secured, if thought desirable, but the elixir and other preparations in the market are nearly inert, and some of them contain noxious elements."

A National Medical and Sanitary Exhibition.

The advantages of public comparison and competition are so well known, that we hope the projected national exhibition of medical and sanitary supplies will be successfully carried out. It is proposed to hold it somewhere next year, the precise place and time to be determined at the approaching meeting of the Sanitary Convention at Indianapolis, October 18th.

Such exhibitions have been held several times in Europe, of late years, in Frankfort on the Main, in Berlin and in London, and they have always been productive of decided benefit, both

to the profession, the public, and the business interests of manufacturers. The last mentioned are so large in this country, that we are sure an ample display can readily be obtained, and a decided impetus will thus be given to further studies in this important branch.

We trust that the Convention will take prompt and decided action in this matter.

Special Reports.

NO. X.—THERAPEUTIC PROGRESS.

(*Continued from page* 222.)

BROMIDE OF POTASSIUM IN DIABETES.

The *Medical Times and Gazette* says that a member of the Académie de Médecine recently read a paper on this subject. During the past six years he has treated fifteen cases. He ignored entirely the routine dietetic treatment, on the ground that the disease consists not in the presence of sugar in the urine, but in the disorder of the organism, which produces the sugar in excess. He observed, by chance, that a diabetic patient whom he was treating for another disease, and who was taking a drachm daily of bromide of potassium, improved very much. He then made experiments on rabbits, by producing artificial diabetes. Four grains of the drug injected into the veins caused the sugar to disappear. He has ever since used this drug with good results in this disease. Alkalies, iron, arsenic and quinine, according to their several indications, form part of the general treatment, as does also muscular exercise of all kinds.

HYDRATE OF CHLORAL IN CHOREA.

The same journal says that Dr. Bouchut's treatment, *par excellence*, of chorea consists in the administration of hydrate of chloral in large hypnotic doses, even for children. He orders for a child of six years thirty grains in *one dose*, the dose to be repeated every day, and increased, if necessary, to forty or even sixty grains. The effect of this dose is six or eight hours' profound sleep, during which the child does not stir. After a couple of days the disease abates, and in about a fortnight the cure is obtained.

CARBOLIC ACID FOR CARBUNCLES.

In the *Australian Medical Gazette*, Dr. Charles Taylor says that he has treated six typical cases of carbuncle, all on the neck, and in men in good physical condition. Into five of them, during the first three days of their existence, was injected pure carbolic acid. In the sixth case free incisions were made first. The result was that the five cases treated without incision rapidly recovered, and the other only closed in after dragging through the usual dilatory course of extensive sloughing and profuse suppuration. In those cases injected with carbolic acid the carbuncle appeared rapidly to put on altered and healthy action, laudable creamy pus was secreted, pain disappeared, and cases that would in all probability have lingered through two or three or more weeks of incision, pain, poulticing and suppuration, were happily terminated in a few days, leaving neither scar nor blemish behind. Dr. Taylor injects into the carbuncle, by means of a hypodermic syringe, five or six drops of pure fluid carbolic acid. He recommends the skin of the surrounding region to be smeared with oil or cerate, to protect it from the escharotic influence of any acid which may escape during the operation. He states that little or no pain is manifested when the acid enters the tumor. When the acid is discharged into the swollen part, the patient at once becomes comfortable, and experiences a glow of pleasing heat passing throughout it. The carbuncle either quickly "aborts," discharges a small quantity of pus, and ceases to trouble, or runs through a few days of active suppuration, secreting abundant and healthy pus, and speedily terminating. In all his cases he states that he has found one application of the acid sufficient, aided by the usual linseed-meal poultice, fomentation, and such constitutional remedies as the individual case may suggest, namely, active alterative aperients, quinine, iron, etc.

SULPHATE OF QUININE IN CORYZA.

Dr. N. Ffalliott states, in the *British Medical Journal* (*Canadian Jour. Med. Sci.*) that the inhalation of a spray of sulphate of quinine will cure in a few hours (twelve at the utmost) coryza or nasal catarrh, if taken at the onset. The solution may be made by dissolving four grains of sulphate of quinine in an ounce of water, with sufficient dilute sulphuric acid to effect solution. A hand-ball spray producer is used. In this connection, the *Monthly Review of Medicine and Pharmacy* recommends, for a common cold, five grains of quinine to be taken as soon as you begin to sneeze and suffer from a feeling of tightness in the nasal passages. Repeat the dose every six hours.

NITRITE OF AMYL IN INFANTILE CONVULSIONS.

The same journal, quoting from Dr. Bridger, in the *Lancet*, says that he has obtained good results from the use of nitrite of amyl in the following cases: 1. Convulsions resulting from an abscess in the tympanum; 2. From tubercular meningitis; 3 and 4. From dentition. One-

third of a minim in mucilage was applied to the child's nostrils every three hours.

CYANIDE OF MERCURY IN OCULAR SYPHILIS.

The London *Practitioner* quoting from *Le Progrès Méd*, says that M. Galezowski speaks highly of the value of subcutaneous injections of cyanide of mercury in treating certain syphilitic lesions of the ocular membranes. Atrophy or neuritis of the optic nerve and changes affecting the retina or choroid are often unsuccessfully treated by the ordinary specifics, and Fournier's albuminate of mercury is in such cases scarcely, if at all, more efficacious. It is, however, in such cases that the cyanide treatment has produced excellent results.

EMBLIC MYRABOLANS, A NEW LAXATIVE.

The *British Medical Journal* says:—

We have received from Mr. Martindale specimens of emblic myrabolans, recently imported from India. It is the fruit, preserved in sugar, of emblica officinalis, or phyllanthus emblica. It is a euphorbiaceous tree; and the fruit, which is about the size of an olive, or perhaps somewhat larger, contains a hard, angular seed. Several species of myrabolans were formerly used in medicine; and an old writer says "they restore youth, improve the complexion, the breath, and the perspiration, and impart joy and hilarity." It is not alleged that this particular species possesses these properties; but Dudd, in his *Hindu Materia Medica*, says that it is "cooling, refrigerant, diuretic, and laxative. It promotes the appetite, and acts as a tonic." We have tried it carefully in several cases of habitual constipation, and have no doubt that it is a valuable addition to our list of laxatives. It must be remembered that it is a natural fruit, and not an artificial preparation. It may be eaten at dinner or dessert, and it would be absurd to regard it as a medicine. It is most valuable for children.

ATROPINE AS A CAUSE OF GLAUCOMA.

The same journal says that atropine has of late years been so widely used in ophthalmic practice, both in the treatment of various painful affections, and also merely for the purpose of paralyzing the pupil to facilitate the estimation of errors of refraction, or an examination with the ophthalmoscope, that the warning afforded by Mr. Streatfeild's letter, in another column, and to be found also in a case read to the Ophthalmological Society by Mr. Snell, and reported in our number for July 15th, has not been sounded too soon. It thus appears, on the evidence of competent judges, that a strong solution of atropine, such as is the officinal solution of the *British Pharmacopœia*, is capable of producing glaucoma in some cases. A way out of the difficulty is afforded by Mr. Streatfeild, who points out that a solution very much weaker than that provided by the *Pharmacopœia* would suffice to produce sufficient mydriasis for all ordinary purposes. Dr. Ringer has, we believe, made some experiments on this subject, and has found that a dilatation of the pupil, lasting some hours, can be produced by a solution containing what a chemist would consider a mere trace of atropine. A solution formed by diluting the pharmacopœial "liquor" with two or three hundred times its bulk of water, would be sufficiently strong.

SALICINE FOR AFTER PAINS.

A writer in the same journal says: There are a number of cases which fall within the experience of every practitioner, where, directly after the expulsion of the placenta, violent after-pains set in, and continue for many hours, often for days, to the great annoyance and exhaustion of the patient; they have nothing to do with the clots in the uterus, as none are ever expelled, and they occur mostly to women of a highly nervous temperament, who frequently suffer from neuralgia at other times. I have found opium useless in these cases, even in large doses; but salicine has the effect of rapidly and completely stopping them. I carry half a dozen powders, of fifteen grains each, in my bag, and give one, dissolved in water, directly the pains commence; to be repeated every two hours till the pain ceases. After two doses, that result is generally accomplished, and I have never had to give more than forty-five grains.

IODOFORM IN PHTHISIS.

At a recent meeting of the Manchester Medical Society (*British Medical Journal*) Dr. Dreschfeld read a paper on the internal administration of iodoform in phthisis. Many pathologists having now for some time held the view that tuberculosis was an infectious disease, depending on the presence of micro-organisms (a view which had received strong support by Koch's important researches), and that tuberculosis, phthisis, and scrofulosis were closely allied, if not identical pathological processes, the author was led, guided by the excellent results obtained in the local treatment of scrofulous diseases by iodoform, to try the administration of this drug in phthisis. This experience extended over more than six months; and the results so far obtained were satisfactory. The iodoform was given in the form of inhalation, and internally in the form of pills (one grain per dose), mixed with creasote and dextrine. The best results were obtained in cases of incipient and acute phthisis; in chronic cases the results were less satisfactory; in a few cases of laryngeal phthisis, the local application of iodoform powder to the ulcerated surface of the larynx was followed by immediate relief, and clearing of the ulcer—without, however producing healing of the ulcers. The conclusions arrived at were these: 1. Iodoform is

well borne by the patient, without producing nausea or gastric irritation. 2. Owing to its anæsthetic properties, it relieves the irritation in the throat, and the cough, especially in incipient phthisis. 3. In some cases, it increased the digestive powers and appetite, and relieved the vomiting. 4. It reduces slightly the temperature in cases of phthisis with raised temperature. 5. In no case have any bad results followed the inhalation of iodoform. 6. Hæmoptysis forms no counter-indication for its administration (in some cases, hæmoptysis entirely disappeared on the administration of iodoform). 7. In incipient phthisis, iodoform seems to arrest the disease.

THE CURE OF LICHEN RUBER WITHOUT ARSENIC.

The London *Medical Record*, quoting from *Monatsb. für Prakt. Derm.*, *No.* 1, 1882, says that Unna has succeeded in curing six cases of lichen ruber by an ointment containing perchloride of mercury and carbolic acid, without the internal administration of arsenic. His formula is: Ung. zinci benzoati, 500 grams; acidi carbolici, 20.0 grams (4 per cent.); hydrargyri perchloridi, 0.5 to 1 gram. Carbolic acid appeared in the urine on the second, and there was slight transitory depression on the third or fourth day of the treatment. The duration of the treatment was in proportion to the time the disease had lasted. Unna recommends this treatment in all severe cases of lichen ruber (acuminatus), which are attended with much itching and depression, as being the speediest means of procuring alleviation and cure.

CONVALLARINE—A NEW DIURETIC.

The *Lancet* says, that Professor Germain Sée has brought to the notice of the Academy of Medicine a new substance, which promises to be of great therapeutic value. It is an alkaloid extracted from the Convallaria majalis, or the lily of the valley. This new alkaloid has been discovered by Dr. Hardy, an eminent chemist, who also discovered the alkaloid from the jaborandi, to which he gave the name of "pilocarpine." Convallarine, the name of the new substance, has been experimented with by Professor Sée, at the Hôtel Dieu, in conjunction with Dr. Hardy, of which hospital the latter is the *chef du laboratoire.* Its therapeutic action is compared with that of digitalis, for which it may be with advantage substituted, as it has none of the inconveniences attributed to digitalis. Dr. Hardy was led to make researches with this plant, from the fact of its being generally used by the peasants of Russia, who employ the herb in dropsies, and in all cases requiring increased diuresis. According to Professor Sée, the convallarine is a powerful diuretic, and it has a marked influence on the contraction of the heart, which it regulates, while it lowers the pulse in a remarkable manner.

PELLETIERINE FOR TAPEWORM.

Dr. H. Wilfort, in the Cincinnati *Lancet and Clinic*, says that Mr. Tanret, of Troyes, the discoverer of pelletierine (the active principle of the bark of pomegranate root), has of late put this anthelmintic in such a palatable form that it is taken without repugnancy on the part of the patient. It is imported in liquid form, put up in small bottles (fifteen grams each), the contents of one of which constitutes a dose for an adult.

No subsequent dietetic measures are necessary, only omitting supper and breakfast before the following day when the medicine is to be taken. It causes no discomfort to the patient, and is quick in its action; in the last case the worm, with its head, was discharged in one hour and a half after the cathartic was administered. It has, in my hands, proved to be the safest and most reliable remedy yet used against tapeworm.

TINCTURE OF IODINE IN ERYSIPELAS.

Dr. Charles F. Hutchinson, in the *British Medical Journal*, says that one of the most remarkably rapid cures he has ever seen followed the application of the tincture of iodine to a case of idiopathic erysipelas of the head and face. The patient was a large, robust man, of very plethoric habit, a free liver, and in every way the type of man one would expect to have a violent attack of an inflammatory disease like erysipelas. Iron and the usual internal remedies had been administered, and when he first saw him he was unconscious, rambling, and thought by all to be *in extremis.* As no local application had been thoroughly tried, he suggested cutting away the hair and painting the scalp with tincture of iodine. At the same time, he increased the dose of iron, and added forty minims of spirit of chloroform to each dose. The effect was magical. On meeting the next day, for consultation, he found every symptom improved; the redness had subsided, the stiffness was nearly gone, and consciousnesss was returning. The next day he was out of all danger, and was soon convalescent. He never had any return of the disease.

He thinks the rapid cure in this case was entirely due to the iodine application, as from its very first application the local symptoms showed marked improvement. Certainly, in his experience, he has never seen so apparently a desperate case recover so soon.

SALICYLIC AND CARBOLIC ACIDS.

The *Lancet*, in a recent issue, says the comparative value of salicylic and carbolic acids given internally was the subject of a recent paper by M. Desplats, of Lille. Each has an analogous action as a febrifuge, and the well-known effect of salicylate of soda in acute rheumatism can be produced, in some cases at least, by carbolic acid, and the rectal administration of either may be substituted for that by the mouth when there are difficulties in giving it by the latter. Urinary disturbances are unimportant and quickly cease if the dose is lessened. Albuminuria is rare, and passes off if the drug is omitted for a short time. M. Desplats mentions, for instance, a case of phthisis, in which, on account of high fever, two injections were given daily for two months, each containing half a gram of carbolic acid, without any ill effect. In the discussion which followed at the Académie de Médecine, M. Dujardin-Beaumetz expressed the opinion that the free use of carbolic acid in injections entailed a considerable risk of pulmonary congestion, and the opinion was corroborated by several other speakers.

SALICYLATED STARCH.

The same journal says that Kersch has recommended salicylated starch in the treatment of eczema. It is prepared by mixing starch gradually with salicylated alcohol of a strength of 2 per cent, allowing the starch to sink to the bottom, pouring off the supernatant liquid, squeezing the starch in muslin, and drying it at a temperature of 80° C. In treating eczema it is recommended that after the scales have been removed the patches should be dried with antiseptic cotton-wool, then moistened with a 2 per cent. solution of salicylic acid in alcohol, and afterwards covered with a thick layer of salicylated starch.

ACTION OF QUININE AND SALICYLIC ACID ON THE EAR.

The *Medical Press and Circular* says that Dr. Kirchener has studied the action of these two medicines upon the ear, in order to elucidate the question, still disputed, as to whether the noises in the ear are really to be attributed to congestion of the labyrinth. Clinical experience has for a long time shown that these agents produced vertigo and a certain degree of deafness, which disappeared immediately on the cessation of the drug; but sometimes when the quinine or salicylic acid were given in large doses these symptoms persisted and constituted a long and serious affection. Experiments on animals proved that quinine and salicylic acid produced hyperæmia of the tympanum, and when excessive, hemorrhage might result. If the hyperæmia lasted a certain time it might cause an alteration of the ultimate ramifications of the nerve.

CHINOIDINE.

Dr. D. B. Bunn, in the *Clinical Brief*, says that chinoidine is a tonic and antiperiodic worthy of more frequent use than is generally made of it. To find a solvent for purified chinoidine, except alcohol, was a trouble to me for some time, until I tried citric acid solution. A little less than one ounce of citric acid in four ounces of water will dissolve one ounce of chinoidine, which is mixable in any proportion with glycerine, syrup, spirits or water. Chinoidine possesses more tonic and antiperiodic properties than are usually ascribed to it, and being cheap, it comes to be a worthy help for country doctors, for whom this article is written. Country doctors furnish medicines, advice and attention on the pay-next-fall plan, and generally take promises for pay in the end, for when fall comes a neighbor delights the doctor with the astonishing intelligence that his former patient is working on the railroad in Texas.

THE TOPICAL USES OF TANNIC ACID.

Dr. G. A. Parsons, in the same journal, says that in all cases of cutaneous capillary hyperæmia, or the subcutaneous cellular transudations, the topical use of—

℞. Tannin, ℥ ss
Glycerine, ℥ j M.

Triturate until perfect solution is effected.

is very satisfactory.

In the first or hyperæmic stage of abscess, or risings, as they are familiarly called, the persistent application of a saturated solution of tannin in alcohol will, in a very large majority of cases, abort the pending abscess and restore the part to a healthy condition without ever reaching the stage of suppuration.

In indolent ulcers, and all unhealthy sores, I have yet to find a remedy that meets the indication better than a triturated mixture of tannin and vaseline. In the different erythema, tannin is almost always the base of my prescriptions. In quite a number of cases of erysipelas, both simple and complicated, I have used tannin, either the glycerinic or alcoholic solution, with the most gratifying results. I never "paint erysipelas with iodine," as was formerly the practice. In subcutaneous cellular thickening and induration, the remedy of remedies is tano-iodine ointment, made with—

℞. Tannin,
Iodine,
Vaseline, aa., q.s. M.

In diarrhœa due to relaxation of the intestinal mucous membrane, as well as the early stages of dysentery, tannin often acts charmingly well through local action on the disordered membrane. While it is true that a portion of the tannic acid given internally is converted into gallic acid, and produces its physiological effect upon the system through the medium of the circulation, it is nevertheless true that no inconsid erable portion, when given in large doses, passes through the intestinal tract unchanged, as a residuum from the stomach, and thus comes in direct contact with the morbid parts, and pro duces its characteristic constringent effect through an altogether local action.

IODOFORM IN DIABETES.

The *Medical Press and Circular* says that Professor Moleschott, of Rome, has published a series of articles in the last numbers of the *Wien Med. Wochensch.*, on the use of iodoform in the treatment of diabetes mellitus. For some months together he kept a series of five patients suffering from this disease under treatment by the drug, and from the results obtained came to the conclusion that iodoform was a drug that promised much in this affection, inasmuch as under its employment for a few days or weeks the sugar disappeared. In those cases that were not cured the sugar reappeared on the discontinuance of the employment of the iodoform, to disappear again when its use was resumed in increasing doses. It further promised much as the improvement set in, even when the use of starchy food was not limited, and even when the patient had to contend with exciting cares and excessive labor. A cure was effected in one case that had withstood the action of salicylate of soda. He recommends iodoform, gr. xv, extr. lactuc. sat., gr. xv, "cumarin" 1-15, to be made into twenty pills, of which one may be taken from twice to eight times a day.

Correspondence.

A War Relic.

Ed. Med. and Surg. Reporter:—

On the 28th of August a man came to me with an abscess on his left buttock, which had been lanced by another physician about five weeks previously, and since then had kept on discharging large quantities of pus, without showing any disposition to heal. Probing the wound, I felt what, from its roughness, I thought was a piece of dead bone, but cutting down upon which I found to be a bullet. On its point and side were two deep indentations, to one of which a little bony substance was adherent. The patient then told me that he was shot before Atlanta, on the 21st of July, 1864, the bullet entering the abdomen, and that he had then remained in the hospital eleven months and finally been discharged. The wound had ever since remained open, discharging a little pus occasionally, frequently emitting flatus, and even soft, feculent matter, whenever he had a diarrhœa Upon inspection I found a small, fistulous opening in the left lumbar region, immediately over the upper portion of the descending colon, but I failed to pass a probe through it, though I have no doubt, from what he said, that it communicated with the bowel. The wound in the buttock healed rapidly, and the man, who was a railroad laborer, returned to his work. He gave his name as Andrew J. Bolstad, a Norwegian by birth, of Company K, 12th Wisconsin Infantry. As war relics are now getting scarce, I thought I would report this case.

John C. Sundberg, M.D.

Red Wing, Minn.

News and Miscellany.

Midwifery in the Sandwich Islands.

The *British Medical Journal* has a letter on this subject from Honolulu, describing the modus operandi of the Hawaiian midwife:—

"The midwives here are for the most part men—usually old men. When the woman's time draws near and labor commences, she is placed sitting on a man's knees, with her back to him. He then clinches his hands over her abdomen, and with all his strength hugs the woman to him, until the child is actually forced into the world, falling to the floor between the operator's feet. The umbilical cord is then cut, and always left very long. Then the woman is placed upon her feet, and the midwife takes her tongue, and draws it steadily until she gulps, or retches, this action causing the prompt ejectment of the afterbirth. After this she goes and flounders about in the sea, and returns to land, ready for such domestic duties as may fall to her lot or inclination. Native children are—as may be inferred from the way in which they are introduced to existence—very easily born; but should the baby stick at all, or make any bother about being born, then the mother knows it is going to be half white, as this latter kind of baby is so much bigger in the forehead. It is a wise child that knows its own father in this country. So well recognized is this fact that natives never ask, 'Who is your father?' but only, 'Who is your mother?' when they desire any acquaintance with one another's genealogy.".

Bait for Ambitious Investigators.

The *Lancet* publishes the following list of prizes for 1883, offered by or through the French Academy of Medicine: The Prix de l'Académie is 1000 francs; the subject, to determine the Clinical Value of Antiseptic Methods in Surgical Practice. Prix Portal, 1000 francs, Is Tubercle of Parasitic Nature? Prix Civrieux, 2000 francs, Hysterical Paralyses and Contractures. Prix Capuron, 2000 francs, on the Influence of Sea

Bathing in the Scrofula of Children. Prix Godard, 2000 francs, for the best work on External Pathology (Surgical Disease). Prix Barbier, for the Discovery of a Cure for any Disease reputed to be Incurable, such as Epilepsy, Hydrophobia, Cancer, Cholera; part of it may be awarded for advancement in this direction. Prix Desportes, 1500 francs, for the best work on Medical Therapeutics. Prix Daudet, 1500 francs, Lymphadenoma. A prize of 2000 francs, under the name of the Prix de l'Hygiène de l'Enfance; subject, to determine by precise Observation the Rôle of First Dentition in Infantile Pathology. Prix Amussat, 2000 francs, for a work based upon Anatomy and Experiment leading to progress in Surgical Therapeutics. Prix Saint-Lager, 1500 francs, for the Discovery of a Cure for Goitre. Prix Saint Paul, 25,000 francs, for the Discovery of a Cure for Diphtheria; the interest of the capital may be awarded as an encouragement for work in this direction.

Frozen Food.

The *Medical Times and Gazette* says it is not generally known that some millions of the human race subsist for one-third of the year on frozen food, not only meat and fish, but also butter, game, milk, etc. We do not refer to the Esquimaux or Samoyedes, but to people living in the utmost affluence, who are compelled to resort to this kind of diet as often as winter comes round. That it is not unwholesome, appears from the fact that (excepting in St. Petersburg) the death-rate is no higher in the towns inhabited by people using this food, than in the average of towns in France; and that the meat loses none of its flavor after months of freezing, is admitted by all travelers. It will not be over the mark to say that twelve millions of people in the Northern Hemisphere consume one million tons of frozen food during the winter months. This does not include the frozen meat consumed in England.

The Detection of Sewer Gases.

The *Medical Times and Gazette* says that Mr. Macleod, the sanitary officer of Glasgow, has suggested a very simple and accurate drain test. The smoke of ignited cotton waste is blown by a machine into the whole drainage system of a building, and by issuing from the mischievous holes and crannies "discloses the position of a leakage with perfect accuracy." When no smoke appears it may be concluded, with perfect confidence that the pipage connected with the sewer is sound and safe. This defect detective is an improvement on the ether-vapor system which has been proposed for the same purpose.

A New Title for anti-Vivisectionists.

Professor Owen has suggested, in a little volume which he has just published, that his opponents, the enemies of vivisection, should adopt the title of "Bestiarians," and he confers on the Victoria-street Society the designation of "The Bestiarian Society." The word is not intended in any degree as a term of reprobation, but he suggests it as one desirous of helping the anti-vivisectionists in their aims, "so far as they do not harm the human species of animals."

Pasteur's Researches.

A sum of 50,000 francs has been placed at the disposal of M. Pasteur, by the French Minister of Agriculture, with the full approval of the Budget Committee. The money is designed to assist the researches M. Pasteur is conducting on the causes and nature of contagious diseases among animals, and is the third sum granted for this purpose. A similar amount was voted in 1880, and 40,000 francs in 1881. The French mind, it would appear, is capable of appreciating the importance of scientific work of this kind, and of encouraging its continuation.

Mortality of Black and White Troops.

The *Medical Times and Gazette* says: According to our Army Medical Department statistics, a striking difference is shown between the state of health of black and white troops. By these returns the black regiments appear to suffer vastly more than their white comrades, from the ill effects of tropical climates. Thus, on the West Indies command, while the mortality among white troops last year was slightly over 8½ per thousand, the deaths among the black troops were more than 19 per thousand.

Sir Erasmus Wilson's Munificent Gift to Margate.

At a recent meeting of the Governors of the Margate Royal Sea Bathing Infirmary, Sir Erasmus Wilson, F.R.S., handed over the key of the magnificent new wing of the Infirmary, to be named the Erasmus Wilson wing, which he has built at an estimated cost of over £150,000. The wing includes two large day-rooms and four dormitories, each to contain sixteen beds, with a swimming bath capable of containing 15,000 gallons of sea water.

Utilizing Orange-peel.

A gentleman in Manchester claims to have succeeded in applying orange-peel to a very useful purpose. Orange-peel dried in or on the oven, until all the moisture has been expelled, becomes readily inflammable, and serves admirably, either for lighting fires or for resuscitating them when they have nearly gone out. Thoroughly dried orange-peel will keep for a very long time, and might be collected while the fruit is in season, and stored for winter use.

The Common Mushroom.

The *Medical Times and Gazette* says that Professor Ponfick, of Breslau, has been making experiments on the common mushroom, and tells us in detail, and with the authority of science, what was somewhat vaguely known before, viz., that all common mushrooms are poisonous, but

cooking deprives them, in a greater or lesser degree, of their poisonous qualities. The repeated washing with cold water, which they usually undergo to clean them, takes away a portion of the poison, and boiling does the rest, but the water in which they have been boiled is highly poisonous, and should always be carefully got rid of. Dried mushrooms are still dangerous for from twelve to twenty days ; they require to be dried for at least a whole month, and are only really safe after four months' drying.

Items.

—The annual meeting of the New Jersey Sanitary Association will be held in Trenton, December, 1882.

—At the jubilee held at the Wurzburg University on the 3d inst., among the celebrities who received honorary degrees were Sir James Paget and Professor Huxley.

—In Providence, R. I., with a population of 104,000, not a single death has occurred from smallpox since 1875. The reason is given as "general and careful vaccination."

—On August 1st, a meeting was held in Queen Square, to promote a movement for the erection of an international hospital at Washington, in memory of the late President Garfield.

—Dr. William Pirrie, Professor of Surgery in Aberdeen University, has resigned. Drs. Alexander Ogston and Ogilvie Will are the two most prominently named for the succession.

—The Irish College of Physicians is about to make arrangements for granting certificates in Sanitary Science to licentiates of the College. The fee is fixed at five guineas, not returnable in case of rejection.

—M. Béchamp says that he has discovered living organisms in the gastric juice similar to the microzymes of the pancreas and liver. M. Gautier denies that these are living organisms, and states that they are merely protoplasmic granulations.

—Dr. L. P. Yandell says: "It was declared, a century ago, by John Hunter, that there are but three classes of skin diseases, one of which is cured by mercury and the iodides, the second by sulphur, and a third class which the devil himself can't cure." Knowing man was Hunter.

—It is the opinion of the most experienced health authorities in London that the poorer classes of Jews are naturally long lived, and that the dietary and other sanitary regulations prescribed by their religion enable them to battle for a considerable time against unhealthy surroundings.

—Unprecedented improvements have taken place in Vienna during the past twenty years. Nearly $40,000,000 have been spent on the city water works, school buildings, new town hall, main drainage, widening and paving of streets, and other useful and ornamental works, including the Danube embankment.

—A midwife in Prussia having washed the body of a person who had died of typhus, and carried the infection thence to a lying-in woman, the Prussian Government, under order of June 26th, 1882, has forbidden the laying out of corpses by midwives, under a penalty of 10s., or in default, three days' detention.

—The oldest university of Germany, Prague, has ceased to be a German university. The upper house in Vienna has passed the law, that from the first of October next the lectures must be given in the czechic language, and the examinations passed also be in the same tongue. This is, perhaps, the most foolish law ever passed by legislators. Who speaks or reads the czechic language? Besides Latin there are only three languages universally known—English, French and German. This decree will be the deathblow of Prague, of whom some said that it was getting ahead. After the loss of Klebs and Eppinger, whom have they left?

OBITUARY NOTICES.

SIR JAMES ALDERSON.

Sir James Alderson, M.D., D.C.L., F.R.S., Physician Extraordinary to the Queen of England, died recently in London, at a very advanced age. After taking the degree of M.D., in 1829, at Oxford, he settled in London, and soon acquired an extensive practice. He was President of the Royal College of Physicians from 1867 to 1870, inclusive. He was knighted Nov. 11, 1869, and Oxford gave him the honorary degree of D.C.L. in 1870. He was appointed Physician Extraordinary to the Queen in August, 1875. He was the author of "Practical Observations on Some of the Diseases of the Stomach and Alimentary Canal," 1847, and "The Lumleian Lectures for 1853-4."

DR. E. S. DREW.

Dr. E. S. Drew, a prominent physician of New Orleans, died recently in that city. He was a member of the Washington Artillery in the Confederate Army during the war, and was well known for the readiness with which he gave his services at all times to the poor and needy.

DR. GEORGE CAPRON.

Dr. George Capron, the oldest practicing physician in Providence, died Sept. 21, aged 81 years.

MARRIAGES.

VAN HARLINGEN—WHITNEY.—On August 31st, at All Saints' Church, Paddington, London, England, by the Rev. H. Bidwell, Bessie Butler, eldest daughter of John R. Whitney, of Bryn Mawr, and Dr. Arthur Van Harlingen, of Philadelphia.

WAGNER—VAUGHN.—On August 28th, 1882, at St. George's Church, Hanover-square, London, by the Rev. B. Savory, Clinton Wagner M.D., of New York, and Libbie Vaughn, daughter of the late Geo. W. Vaughn, Esq , of Portland, Oregon.

DEATHS.

BURPEE.—In this city, on the 14th inst., David Burpee, M.D , in his 56th year.

CLEMENTS.—On Thursday, September 14th, at Phœnicia, Ulster County, N. Y., Jas. W. G. Clements, M.D., of New York City, in the 67th year of his age.

SHANNON.—In Kingston, Ohio, August 24th, of lung and heart disease, Dr. R. W. Shannon, aged sixty-five years.

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Original Department.

Lecture.

THE TREATMENT OF EPILEPSY.

BY M. MAGNAN,

Physician to the St. Anne Asylum, at Paris.

Gentlemen:—In order to complete the course of clinical lectures on epilepsy, it will be necessary to consider the treatment appropriate to the malady.

It would be very interesting to follow the therapeutic history of epilepsy, but in the treatise of M. Delasiauve you will find an enumeration of the diverse methods of treatment successively employed. As these lessons are meant to be essentially practical, we will confine ourselves to the consideration of those methods which appear to-day to give the best results.

Jaccoud very judiciously recommends careful research regarding the causes which led to the development of the malady, so as to obtain thus the principal indications for treatment. Unfortunately these causal indications are often wanting, or exceedingly obscure. I can, however, cite one case where the primary cause of the malady furnished excellent indications for treatment.

The epileptic attacks, sometimes complete, sometimes incomplete, came on in this case subsequent to the cicatrization of a wound on the heel from the kick of a horse; the attacks were preceded by an aura commencing at the wound. The painful cicatrix situated over the calcaneum was carefully and completely removed by M. Trelat. Since then the duration of the attacks has been much shortened, and they have not occurred so frequently, but have not completely disappeared. As the wound was received many years since, it is probable that section of the saphenous nerve would not have any favorable effect; in certain cases where chirurgical intervention has occurred soon after cicatrization, complete cure has been obtained.

Indications for treatment can often be drawn from the general condition and habits of the patient.

Anæmia and scrofula, for instance, which are so often found associated with epilepsy, should be energetically combated by remedies appropriate to these morbid conditions; if masturbation is practiced, or the patient constantly commits alcoholic or venereal excesses, every effort should be made to eradicate these bad habits.

Unhappily, however, the causal indications are wanting in most cases, and when they are recognized, it often happens that rational treatment is of no benefit, epilepsy being of such long date that it has become emancipated from its primary cause. In such cases it will be necessary to have recourse to the treatment which, up to the present, has given the best results.

As a general rule the bromides give the best results, and among the bromides, the potash salt seems to be most effectual. This salt was first used for epilepsy, in England, towards 1853, by Laycock and Wilks.

These physicians recommended it particularly in a form of epilepsy which seemed to be due to menstrual derangement.

Almost simultaneously, MM. Bazin, Hardy and Brown-Sequard experimented with it, and

somewhat later M. Germain-Sée studied its action in a number of cases, and drew the attention of practitioners toward it, in a lecture delivered at the Beaujon hospital. Since then the physicians at Bicêtre and at the Salpetrière, Falret, Voison and Legrande du Saulle, who observed the malady on a grand scale, have rendered its use common.

Its efficacy in many cases is incontestable. "The bromide of potash, says Gubler, sometimes cures, often ameliorates, and hardly ever proves of injury, in this disease."

M. Germain Sée, in a clinical lecture at the Hotel-Dieu, in March, 1877, proclaimed the bromides as constituting the only efficacious treatment in epilepsy. He founded his assertion on fifteen years' experience, treating exclusively by this method 130 patients, 58 remaining more than three years under observation. For myself I have experimented with all the new medication lauded in the treatment of the convulsive neuroses, but I return always, in the end, to the bromic salts, which are, in reality, of great efficacy in epilepsy.

The bromides, and particularly the bromide of potash, still forms, then, the basis of treatment; but we must call special attention to the manner of administering them. They should always be administered in solution, experience having demonstrated that their ingestion in the solid state determines grave lesions of the digestive tube. The salt can be administered in almost any of the liquids in common use, in water, wine, milk or bouillon. I give it preferably in one of the aromatic or bitter infusions, with the addition of a small proportion of syrup of orange-peel; these substances slightly stimulate the stomach and aid in the absorption of the drug.

Bromide of potash should be given in doses of one and one half or two drachms daily, but in certain cases of exceptional gravity, either on account of excessive frequency of the attacks or the delirium which follows them, it is found necessary to largely increase the dose, and carry it as high as two and one-half, or even three drachms.

I order it always to be taken just before meals; it is thus better tolerated by the stomach, and the treatment can be longer continued without inconvenience. By administering the bromides methodically, the patient can be maintained constantly under the influence of the drug, each dose taken increasing the action of the preceding dose.

As Gubler recommends, it is better to suspend from time to time the use of the drug, "in order to avoid the production of cumulative effects produced, not by the doses successively taken, but by a pharmaco-dynamic action of increasing pressure or tension" (sic).

When the attacks have completely disappeared, it will, nevertheless, be necessary to keep the system for months, or even years, under the influence of the drug. This may be effected without the constant administration of the medicament, by giving it at sufficiently near intervals. This is the sole means of rendering the cure complete when it is possible, and of keeping the attacks within bounds when it is impossible to completely eradicate the disease.

The treatment must be continued for several years; but as soon as the attacks have become less frequent and less violent it will be well to suspend treatment for five or six days and then recommence, and continue giving the drug for fifteen or twenty days, and again allow another period of repose. I have remarked that by pursuing this course, the diverse functions momentarily troubled by the action of the bromides become reëstablished more rapidly than if only one or two days of repose were allowed.

As you have observed in my hospital service, with the patients under constant surveillance, I am in the habit of giving much larger doses of the bromides than could be administered with safety in private practice, for under such conditions it is possible to speedily arrest any accidents due to bromism, if such supervene. The administration of large doses gives rapidly whatever good effects can be obtained from the medicament. Nevertheless, the dose should, as far as possible, be in proper proportion with the profession of the individual, and it should not be forgotten that those who lead a sedentary life have less tolerance for the medicament, and are most subject to the development of toxic symptoms.

I need not insist on the physiological and therapeutic action of the bromides. It must be remembered that some of these salts have an anaphrodisiac action, but less energetic in this respect than has been generally believed.

These salts give to the breath a peculiar characteristic odor, and produce later, if their use be long continued, anæsthesia of the pharynx, angina, an acnéiform eruption on the face and back, and sometimes on the lower limbs, veritable ecthymatous pustules, which leave deep ulcerations after them. In some cases, almost as soon as the medicament is given, derangement in the digestive organs

occurs (anorexia, epigastric pain), and intellectual dullness, with diminution of memory, general lassitude; later on, muscular feebleness, with syncopal tendencies, and even vertigo, occur. When these complications supervene, the administration of the medicament must be immediately interrupted, and tonics given for the time being.

In cases where bromide of potash does not prove successful, or where it is not tolerated by the stomach, Charcot and Brown-Séquard have for many years recommended the employment of the other bromides, the bromides of sodium or of ammonium, either singly or associated together, in doses of from 1½ to 2 drachms. I have myself long experimented with the bromide of zinc, and in certain cases it proved successful.

M. Hublé, in a thesis written under the auspices and in the service of M. Bourneville, considering the constitutional conditions which should lead to the employment of one bromic salt in preference to others, gives the preference to bromide of arsenic, when the patient presents any marked predisposition to cutaneous disease.

Besides this, M. Charcot recommends cold douches during the period the medicament is administered, to augment the rapidity of absorption.

For the proof of this assertion, he refers to the experiment of Fleury, who remarked that the pupil became immediately dilated after the application of a belladonna suppository, when the cold douche was employed for a very short period, even a few seconds.

In some cases, no matter what may be the mode of administration, the bromides have no beneficial effect; it will then be necessary to fall back on other methods of treatment.

If the attacks are very mild, coming under the category of those cases to which the term "petit mal" has been applied, or if they consist simply in unconsciousness, lasting but a few seconds, Gubler recommends the extract of belladonna, already employed by Trousseau in similar cases, in doses of one-half to one grain per diem, or sulphate of atropia, in doses of one-fiftieth to one-tenth of a grain per diem.

You are aware, on the other hand, that Herpin has recommended very highly the zinc salts, which gave him good results in certain cases; we have recourse to them at present in cases where the bromides prove inefficacious. I myself employ the oxide of zinc, in doses of from five grains to forty five grains per diem; the valerianate of zinc, in doses of two to fifteen grains; the lactate, from two to thirty grains, associated either with extract of valerian or conserve of roses.

Herpin also recommended the copper salts, but M. Bourneville, who has experimented with them methodically, has never observed any satisfactory results from their administration.

Finally, there is no need to add that these diverse forms of medication may be combined in several ways. One will often be surprised to observe cases which have not been benefited by any one of these medicaments taken singly, much ameliorated when two or more are simultaneously given.

The use of the bromides is followed, in the majority of cases, by a favorable result, even from the debut of treatment. But, after five or six months, it will be often found, to the surprise of the observer, that notwithstanding the continued use of the medicament, the attacks become again as frequent as before the commencement of treatment. It is at this time that a course of bathing and hydrotherapeutic applications will restore to the bromic salt its original efficacy, not only maintaining the amelioration obtained from it, but also rendering it more complete.

It is often necessary to administer tonics in connection with these medicaments, such as the soft extract of quinquina (Fr. cod.), the tincture of bark and cod-liver oil etc. The patients should use only aliments easy of digestion, and the evening meal should be light. This last recommendation is particularly applicable to patients who generally have their attacks at night.

Finally these patients, subject at any moment to lose consciousness, and always under the imminence of an attack, should receive special attention from those about them. They should be cautioned against mounting on chairs or ladders, against remaining too near collections of water or too near the fire; in a word, they should avoid all positions or occupations where a sudden loss of consciousness might prove dangerous. Very many accidents might be avoided by proper attention to such advice.

—A solicitor in England has obtained a verdict against a town for $10,000, as compensation for personal injuries caused by drinking impure water supplied by the Corporation. The water in its passage through the service pipes had become so impregnated as to produce in the plaintiff's case every symptom of acute lead-poisoning. A point as to the liability of the Corporation was reserved.

Communications.

A CASE OF STRANGULATED HERNIA OF THE VERMIFORM APPENDIX—OPERATION—RECOVERY.

REPORTED BY E. H. BENNET, M.D.,
Of Lubec, Me.

Samuel Campbell, aged 64; occupation joiner and painter; constitution and general health has been good; resident of Eastport, Me.

About three years ago he found a lump in the right groin, which attracted very little attention. He thinks it disappeared at times; was never painful. About eighteen months ago he had several attacks of slight pain across the lower part of the abdomen, which he supposed to be colic or some trouble with his water.

On February 9th, 1881, about noon, he was seized with violent pain in the hypogastric region. He supposed this to be similar to the previous attacks, differing only in severity. Had no suspicion that there was any connection between the pain and the swelling in the groin. He continued to suffer for about two hours, when he sent for his family physician, Dr. L. P. Babb.

When search was made for the cause of the pain, a lump the size of a hen's egg was found in the right crural region. It was not painful nor tender to the touch, and felt like an enlarged gland. Supposing it might be a case of rupture, attempts were made to reduce it, with negative results. Morphiæ sulphatis, gr. j, atropiæ sulphatis, gr. $\frac{1}{50}$, was given hypodermically and followed by relief. The patient remained comfortable until the next morning, when the opiate was repeated, with a similar effect. Large enemas had been used, but failed to produce any action of the bowels. Physic was now ordered, but only followed by a return of the pain, when vomiting supervened.

During the evening of the 10th patient got easier and the tumor now had a softer feel, but up to this time it had presented all the characteristics of an enlarged gland.

Dr. H. B. Knowles, of Calais, being telegraphed for during the day, arrived at 11 o'clock, P. M. After examining the case he considered the diagnosis uncertain. The patient being free from pain and not vomiting, it was thought best to wait and in the meantime endeavor to act on the bowels by mild cathartics. Dr. Knowles also endeavored to reduce the enlargement, but without avail. The laxatives given acted as before, *i. e.* by causing a return of the pain and vomiting. During the day (11th) the vomiting became stercoraceous, when it was decided to operate and give the patient the benefit of the doubt.

The reason why surgical interference had not been resorted to sooner was, because the attending surgeons found it difficult to convince themselves that the tumor really contained either strangulated intestine or omentum. The feel of the tumor was everything but convincing, and it was quite rational to suppose that some internal obstruction was the true cause of the serious symptoms which presented themselves. When is was decided to operate Dr. Wood and the writer were called to assist, it being done at 2 P. M. on the 12th. During the morning the patient had vomited a large quantity of matter which had a decidedly fecal odor, and evidently contained fecal matter. No nourishment had been retained for some time; was considerable exhaustion, a haggard countenance, feeble pulse and cool extremities. As far as possible, antiseptic precautions were observed. When the strangulated portion was reached it was found to be gangrenous, and neither intestine nor omentum, but the free end of the appendix vermiformis.

The stricture was readily relieved; when, if permitted, the whole would have readily passed back into the abdominal cavity. The appendix occupied the femoral canal. Gimbernat's ligament could be felt to the inside; the femoral vessels to the outside, and Poupart's ligament in front.

The blackened tissues extended back about two inches and a half, behind which they were apparently healthy. A silk, carbolized ligature was tied around the appendix, above the diseased tissues, and the gangrenous portion removed.

The ligature was allowed to protrude through the wound, which was closed by interrupted sutures.

After recovering from the anæsthetic, the patient vomited a large quantity of extremely offensive matter; this proved to be the last of the vomiting.

Nothing worthy of special note happened during the after-treatment. An occasional enema kept the bowels in good condition. Tonics and stimulants were used throughout.

At the end of four weeks the wound had healed.

After the third month the patient resumed his work as painter (in-doors), and during the following summer worked on the outside of buildings, standing for hours on a ladder, and show-

ing his usual vigor. At the time of this writing he is enjoying good health ; no return of the old trouble.

CENTRAL AMERICAN MEDICAL CURIOSITIES.

Collected for the MEDICAL AND SURGICAL REPORTER

BY FRED. C. VALENTINE, M.D.

I propose to offer the readers of the MEDICAL AND SURGICAL REPORTER a collection of curiosities, I may call them, as collected among the more intelligent people, and even frequently employed by physicians in the treatment of diseases. In justice to my Central American colleagues, I must premise that the best educated among them employ some of the ridiculous means I shall detail, only to yield to popular prejudice, and it is remarkable how a physician can raise himself in popular esteem by a case which improves, partly as a result, or perhaps better, notwithstanding, the ridiculous medication which the ignorant friends of the patient prescribe, and to the employment of which the medical attendant consents.

But apart from their consideration as mere curiosities, the reader will find some ethnological facts which seem to show that a number of recent discoveries in civilized materia medica are of very ancient employment in Central America. In the following recital I shall, of course, omit all discussion and criticism, except in instances where they are particularly requisite to show the line of thought which gives an alleged indication for a certain medicament or line of treatment.

Inasmuch as a sort of empiricism seems to guide the whole matter, no system is claimed, no do I make any attempt at classification, but shall simply recount whatever my notes and memory furnish.

Thus bees are used: Eighty to a hundred live bees are thrown into a pint of hot water, and half an hour later the liquid is strained through a cloth and administered in teaspoonful doses every two or three hours, to promote diuresis. It is claimed that this infusion will cure retention of urine as well, suggesting in both instances the use of apis melifica by the Hahnemannian followers.

Externally, bees are also used, by toasting and powdering them. The powder is mixed with an equal quantity of lard, and smeared on bald heads, to arrest and cure alopecia.

Bran is frequently packed into and upon slight wounds, to arrest hemorrhage. For cosmetic purposes a paste is made of it and allowed to ferment. When a sufficient degree of nastiness in flavor has been acquired to make an editorial paste-pot a desirable substitute, it is smeared upon the dark one's face (for in a majority of instances the fair one requires no such aid) under the presumption that it will soften the skin and blanch it.

A weak infusion of bran is largely employed in catarrhal affections of the respiratory and digestive mucous membranes.

Annotta is used as a tonic and an anti-dysenteric. The reddish paste is smeared on the skin as a prophylactic against the bites of mosquitoes and gnats.

Water has a limited application in disease. Sulphurous waters are used in chronic rheumatism and in skin diseases, and inveterate metrorrhagias are treated with three glasses of this water daily.

In epistaxis, cloths dipped in cold water are applied to the forehead and scrotum, and in post-partum hemorrhages to the loins, sacrum and abdomen.

A jet of water persistently thrown upon the head is recommended for that vague affection called *gota serena*, which may mean leucoma, pannus, and all forms of cataract.

Baths have their special indications ; cold ones are recommended to young persons, warm baths to women, and hot baths to old people and those called melancholics.

Very cold baths of long continuation, are recommended twice a day for insanity, especially monomania.

Cold baths are prescribed for insomnia, involuntary emissions of semen, benign blennorrhœas and incontinence of urine.

The baths are limited, except in insanity, as follows: Cold baths should not exceed six minutes, and the hot bath should not be prolonged over seven, while the warm bath should not be enjoyed for over an hour. The last has many advantages claimed for it in inflammatory affections of the eyes, and of the abdominal viscera, in jaundice, in nervous affections and to facilitate childbirth.

Vapor baths are strongly recommended as a prophylactic and a positive remedy against rabies canina, which affection I have often heard spoken of, but never have witnessed in Central America. The dogs which I have seen killed for this affection were ill with ordinary convulsions. One of my patients, who was bitten by a presumed mad dog three years ago, is alive and well to-day, and I prevailed upon her not to have the dog killed. He died nineteen days

later, of convulsions. (I do not make this statement from any desire to appear humorous.)

With my friend Dr. L. L. Dorr, of San Francisco, who wrote on the question of rabies in the New York *Medical Journal*, I do not believe that real rabies has ever been observed on the Pacific coast.

Sea water as a beverage is recommended as a purge, when nothing more unsavory is at hand, and is said to be efficacious in chronic hepatitis, in jaundice and adenitis.

Sea baths are prescribed in rachitis and scrofulous affections, in chlorosis, chronic cystitis, sterility, in amenorrhœa and dysmenorrhœa, in cephalalgia, in chorea, and some forms of rheumatism.

Bathing in rivers which run from east to west is deprecated, and all baths are to be used but sparingly, or not at all, by convalescents, those predisposed to intermittents, and those suffering from pulmonary affections.

The alligator pear (Laurus persea, Spanish aguacate or agualate, in Peru, palta), which makes a most delicious salad, and by some is called vegetable butter, is accused by our Central American unprofessional colleagues, as being an innocent aphrodisiac, for those who enjoy good digestion.

The leaves of this plant are pulverized after being dried in the sun, and used in the following combination in dysmenorrhœa and sterility: Powdered aguacate leaves, fine iron filings, saffron and aloes, forty-eight grains each. These are well triturated together and mucilage of gum arabic is added. The resultant mass is divided into forty-eight pills, of which six or eight are taken per diem.

Aguardiente, distilled sugar-cane juice, is considered a carminative and stimulant to digestion. In extreme debility, from any cause, in cholera morbus and poisoning by arsenic, it is used. It is added to the many herb infusions which are prescribed as sudorifics.

Splenitis is treated by two tablespoonfuls of aguardiente with a pinch of salt, before the first morning meal; sufferers from drunkard's liver, however, add nothing to their aguardiente, and take it without reference to time or quantity, or any other consideration except a financial one.

A would-be authority on medicine says, in all earnestness: (I translate literally), "According to Mr. Richard, an injection (*we suppose into the urethra*, because the author does not say where) of half a tablespoonful of aguardiente efficaciously cures swelling of the scrotum, called hydrocele." I am glad to say that this treatment has never been employed to my knowledge, and I feel confident that I am not alone in my sympathy with patients who may have been induced to inject this spirit, by all who know that it rarely is under 40 proof. Old women, whose villainy is in proportion to their ugliness, insist upon curing all affections of the eyes in children by instilling aguardiente between the lids, upon the conjunctiva. A wretch ruined a case of scrofulous iritis for me in this manner, and the poor child, for all its life, will have to regret its great aunt's brutality, by wearing an artificial eye.

"Adlocucion," which I have not been able to find in any dictionary or other work at my command, is a treatment consisting in having a man in health pass the palm of his hand several times over a diseased part, at half an inch distance, blowing upon it between each "pass." This is considered very efficacious in erysipelas.

Garlic, mixed with flour, is used as a sinapism, and mashed alone, as a vesicatory. One or two cloves of garlic are skinned, and swallowed whole, to cure hiccough.

For mental derangements, garlic is boiled upon hot ashes or embers, and mixed with cow's tallow, one part of the former to two of the latter; this ointment is spread upon cloths cut the shape of insoles of shoes, and is sprinkled with a powder made of the outer shell of a native black pepper. The plasters thus prepared are applied to the patient's soles. I doubt whether physicians anywhere would recommend this treatment, even for malingerers.

The natives claim that if garlic is rubbed upon a loadstone it will lose its magnetic power.

Basil (ocymum basilicum) is used as a diuretic, emmenagogue and carminative. A quarter to half an ounce of the leaves are steeped in two pounds of boiling water, and taken ad libitum.

The tomentose wool of the cotton seeds, carded, is placed thickly upon recent burns, and the seeds are ground up with sugar, to make an orgeat, which certainly is a pleasant expectorant.

It is due to the Central Americans that I say that during the more than five years that I lived and traveled in their country I have never known the cotton root used to produce abortion, nor, in fact, any other drug. I regret to state that the only cases of fœticide have been among foreigners; of what nationality I will not reveal.

Lavender (Lavandula Spica L.) is considered valuable in paralysis, epilepsy and rheumatism, in half drachm doses of the powder. Indolent glandular tumors are treated with an ointment, made of one part of the powder to two of suet, which is spread upon a cloth, heavily sprinkled

with the powder, and then applied to the swelling.

A strong infusion of the bark of the almond tree is recommended in all kinds of intestinal worms.

Starch is used as a drink and injection in dysentery and diarrhœa. "Centipede's walk," *i. e.* the site of the introduction of the poison-claw of this insect into the skin, is treated by the application of a thin paste of starch and vinegar.

Starch is presumed to increase the action of tartar emetic, and is given as follows: Tartar emetic, one grain; starch, one-half scruple (12 grains Spanish Pharmacopœia), and sugar, one drachm (72 grains Sp. Ph.), well triturated and divided into 4 powders, of which one is given every fifteen minutes, in any drink.

Spider-web has been used, from time immemorial, as an antiperiodic, but is especially recommended in the quartan form. That of the small black spider, which builds its web funnel-shaped, within the holes in walls, is preferred. It is also claimed that it will cure the nervous symptoms in pernicious fevers. It is rolled into pills without an adjuvant and given from 20 to 25 grains daily.

Rice boiled in water or milk is used as a poultice on local inflammations. Rice water is claimed to whiten the skin. Continued use of rice as an article of diet is presumed to cause ocular inflammation, and (homœopathically?) is recommended in hordeoli.

The artemisia vulgaris has a reputation as a stimulater and promoter of menstruation, as a vermicide and as a remedy for epilepsy. A handful of the leaves are fastened to the loins by those who make long journeys afoot, to prevent exhaustion. Of course, artemisia is used, as is nearly every other remedy in this list, for rheumatism.

Sulphur is used as a purge, in "scrofula," in asthma, in affections of the bladder, in diseases of the skin, etc., etc. It is said to be particularly efficacious for spasms of the muscles of the legs, and for these is worn in little bags, tied to the inguinal region.

The egg-plant, boiled and mashed, is applied as a poultice, hot, to inflamed hemorrhoids.

The intestines of recently killed animals are wrapped around paralyzed parts, and I have seen patients placed as far as possible within the thorax and abdomen of an ox which was in the throes of death.

Crabs, rabbits and hares, which "ever have their eyes open," must rest sometime, perhaps after death;" but when made into soups are said to kindly communicate their much needed sleep to the partaker. Consequently they are prescribed in insomnia. Crab soup is also recommended in leprosy and phthisis.

Cordoncillo, a creeper which I do not know whether it has been classified or not, is prescribed for elephantiasis. Those who recommend poultices of the bruised leaves for this disease, claim that elephantiasis is a result of frequent attacks of erysipelas. This pathological view may have deterred me from investigating the matter more closely.

Those persons who are classified as "of sterling worth," because one cannot say anything else favorable of them, and "melancholics," are advised not to use cocoa in any form, as it is believed to be harmful to them under any circumstances. Others may take it boiled in milk or water, at all times, as it is very nutritious. It prolongs life more than any other aliment, and gives even to the skins of old people a certain freshness and a "lustful appearance."

Cocoa butter is nutritious and "sweetening" (antacid?) Pyroses which *are caused by ulcerations* are cured by a drachm of cocoa butter, taken three times a day, in hot water. This information was given me by a most intelligent person—not an M.D.

Coffee enjoys a reputation of possessing antiperiodic properties. For this purpose the following potion is prepared: Three-quarters of an ounce of the powdered toasted beans are boiled in four ounces of water, until reduced one-half. The aqueous tincture is strained and two ounces of lime juice is added to it. This draught is taken in the morning, two hours before the first meal.

Lime.—Lime-water is prepared by slaking one ounce in a pound of water, and shaking well. The water is poured from the sediment and a second water added. The supernatant liquor is "remedial." It is recommended as a positive cure in diabetes, which disease is recognized by the fact that bees, flies and other insects seek the urine. In these cases, four to six tablespoonfuls are given daily. In diarrhœas it is mixed with infusion of rhubarb root. "When children are dying of debility it returns them to life." In sciatica, lime, in powder, one part, is mixed with two parts of honey and applied along the painful region.

Sugar-cane root is recommended as a diuretic and sudorific. One ounce of the root is boiled in four pounds of water until reduced one-half, and all is taken during the day; in addition to which the patient drinks a large quantity of

water, about eight ounces every hour, and if he does not urinate and perspire freely, it is "because something serious ails him."

Barley water, with sugar and lime juice, is extensively used in catarrhs of all the mucous membranes. In coughs, equal parts of barley, marshmallow root, and elder bark are boiled together and strained. While hot, sugar and the yolk of an egg are added, and the dose is taken upon retiring.

"Raw onions, eaten, render the breath unsavory, irritate the stomach, and excite immodest desires. Therefore, they are not used by persons of a good education."

Indolent tumors are treated by poultices composed as follows: Onions roasted upon hot ashes, ground mustard and common soap, equal parts, are mixed with a sufficiency of water, and the mass is boiled until of cataplasm consistency.

(*To be Continued.*)

Hospital Reports.

PHILADELPHIA HOSPITAL.

A CLINICAL CONFERENCE.

BY JOHN M. KEATING, M.D.

Reported by W. A. Edwards, M.D., Assistant Pathologist to the Hospital.

The Syphilitic Diathesis.

Gentlemen:—I have several cases to show you this afternoon, which illustrate well a subject most interesting and important.

Let us study these cases separately:—

This woman, aged 25, a splendid specimen of health and youth, carries in her arms her baby, aged six months, which, as you see, unfortunately, bears the marks of an inherited diathesis.

The woman tells us that her first child, a boy, died when four months of age; it was born with snuffles, which persisted until death, the infant dying of cholera morbus.

This baby that she carries to-day, Mary M., was born with *snuffles*, and, as you perceive, still has them. You will also notice that it has an occasional dry, hacking cough; in an adult we would interpret this as syphilitic laryngitis. The child was vaccinated when four months of age, with bovine virus; a month afterward it suffered from a violent attack of varicella, the pustules leaving, as you see, marked pits all over the child's body, especially over the spine. Ten weeks ago this small tumor, about the size of a silver twenty-five cent piece, appeared on the right labia. You notice that it is painless, although at first it was attended by slight tenderness; in its earlier stages it was freely movable, now it has become attached to the surrounding tissues. It has a peculiar tint and shows no tendency to pointing, as an abscess of this size would. Upon palpation it gives to the finger a sensation of firmness, and also retains its shape under pressure, the purplish tint, however, disappearing. It possesses neither the elasticity of a fatty tumor nor the firmness of a scirrhus. We also observe, surrounding it, a tubercular infiltration, round, or perhaps oval, slightly elevated, of a deep coppery-red color, and around it is a well-marked hyperæmic areola. All these points, taken in connection with the snuffles and cough, give us a clear history of congenital syphilis; the small tumor is the gummous syphilide or gummous tumor.

We notice a large gumma over the left trochanter, which exudes a thin, ichorous pus; here the lesion has gone on to ulceration, and presents the gummous ulcer; these ulcers, when they first form, are deep and sharply cut. they extend in all directions, until they form this typical ulcer, with its rounded outline and punched-out appearance; the floor is uneven and bathed with sanious, fetid pus; its edges are thickened and surrounded by an areola of hyperæmia. To the left of the occipital protuberance another characteristic tumor is seen. On the back, about the twelfth rib, you may notice two typical growths; one of them has opened spontaneously, like a furuncle, by a single aperture.

You note that this child is remarkably well nourished; it has never had a day's illness since birth; in fact, until varicella brought with it some change, or, at least, modifications of the typical eruptions, which were suspicious, there was no spot or blemish which betokened an inheritance of this kind. The mother volunteers that the child was born with a cold; but that this passed off without treatment. She also says that her other child was "born with a cold." Was this syphilitic coryza? I would call your special attention to the fact that the conditions present in the case are simply as you see it; there is no malnutrition; no lesions of the viscera, as far as we can tell, no diarrhœa, and no evidence of bone involvement.

We think that this very late appearance of the syphilitic diathesis is due, in all probability, to the inheritance of a very small dose, and my friend, Dr. Arthur Van Harlingen, who has studied the case with me, and to whom I am indebted for the grounds upon which I base the positiveness of my diagnosis, assures me that this patient affords a marked example, both in the character of the lesions and want of nutritive disturbances, of late manifestations, owing to mild infections. But let us turn to this other child, and study the contrast.

This little patient, baby D., aged fifteen months, was born in the house, but was taken out when about two months of age.

The resident accoucheur tells me that the child was born with a purulent ophthalmia and snuffles. We know nothing more of the infant until it was returned to us a few days ago, in its present condition, which, as you can see, is horrible in the extreme.

The little mite presents three well-marked condylomata around the anus; that is to say, just where the mucous joins the cutaneous surface, which, as you know, is a favorite seat for these manifestations. Around the mouth you see those fissures and cracks that are such a frequent accompaniment of this diathesis in infants.

Just over the left ear we notice three large, purulent blebs; each one is nearly as large as your finger nail.

The picture which this infant presents is horrible in all its details. You notice the emaciation, the skin merely covering the bones. The staring eyes, looking like an animated skeleton, the turgid veins, with all their tortuosities apparent, lying directly upon the skeleton, and covered only by the thin layer of skin, from which all the subcutaneous fat has disappeared. The abdomen is finely reticulated with a venous network, which gives the child a mottled-purple hue, but upon close examination you feel the skin parched and leathery, with brown, or rather, bronzed splotches of pigmentation. This peculiarity is noticed also upon the face, on the head, and in the folds of the groin. It alone is characteristic of this affection. Let us examine the mouth. You find the mucous membrane parched, with no secretions; the tongue is coated with a dirty fur, and patches, curd-like, are adherent to the whole mucous surface. These fungi, that you will find this to be, with your microscope, are pathognomonic only of low vitality or typhoid state. They thrive in conditions of low grade, and are *post hoc* and not *propter hoc*, in relation to the disease. You will note that the angles of the mouth have a few mucous papillæ; they are to be taken into consideration as evidence for your diagnosis; but most important still, is the fissured condition of the angles of the mouth, a dry, scaly fissure, with a bronzed tint, a condition which remains permanent for a long time after the other symptoms have succumbed to treatment. Let us examine the child yet more closely. You will notice these patches about the anus; they are papular, with a grayish centre, beneath which is an excavated pit, with sharp, jagged edges. You notice also this growth, hemorrhoidal in appearance, which is a condyloma, a true sign of congenital syphilis.

Now, gentlemen, let me warn you, these cases are infecting; they may have been the result of inheritance or they may themselves have resulted from infection, from contact with the mother's parts. As far as we can tell, this child has no special organic lesion which is killing it; it is gradually wasting, drying up, as it were, from a blight which is radical in its activity, affecting the nutritive processes *primarily*; supplying diseased blood and elaborating diseased fluid to digest the assimilated food. Whatever it takes, passes off undigested. The circulation is weak, and it has a short, dry, hacking cough, which is probably caused by the accumulation of bronchial and laryngeal secretion, which its debility fails to permit it to expectorate.

Fortunately, most of the children so diseased die in spite of treatment, notwithstanding the philanthropic attempts of those ultra-charitable folks, who, ignorant of the stains of wickedness, cry out in favor of an attempt to vivify the diseased germ. Fortunately, a kind Providence so ordains it that these children all die; those whose syphilitic manifestations develop soon after birth; the mortality being in proportion to the rapidity with which these symptoms show themselves. When the infection is slight and the lesions are late in development, treatment is important and valuable.

Our little patient has just died, and if you will follow me to the post-mortem room, we can there witness the pathological changes which have taken place.

Post-mortem.—Examination three hours after death. Subject is much emaciated and unusually small for its age. Head is rather small and typically quadrangular. Adipose tissue in all parts of the body is much wasted. Skin is extremely thin. At the junction of the cartilages with the ribs we notice a thickened or nodular appearance, that reminds one of a rachitic subject.

Lungs. These organs are studded with nodes and cheesy masses; these are also deposited in the parenchyma of the lungs. These masses resemble tubercle in their appearance and arrangement, but they are undoubtedly syphilitic in their origin. Numerous gummata are seen on the parietal surface of the pleura; some of these are as large as grains of corn, causing this very rough or ragged feeling that you note.

The peritoneum is also covered with these syphilitic granulations; the liver shows them in the parenchyma and scattered over its capsule in great numbers. The spleen and its capsule have not escaped the invasion of the disease. The mesenteric and lymphatic glands are enlarged, infiltrated and hyperæmic. Pancreas is found to be indurated, as are also the thymus and thyroid glands. Heart normal, containing no clots, the pericardium covered with granulations. Kidneys and suprarenal capsules are normal.

Let me show you another example of syphilitic eruption in this babe. This child, Baby O., age five and a half months, was born in the house; you have seen it before, and you may remember its appearance when it was presented to us suffering from varicella.

Although the mother was treated for rupia before its birth, you will remember the child exhibited no symptoms of sufficient importance to attract attention, with the exception of snuffles, until it was vaccinated with bovine virus.

You will note, to day, an eruption, looking like eczema, upon the angles of the mouth, extending over the chin, and spreading from that point to a position just opposite the larynx. Is this eczema? I may say that it is not; it is not at this point that eczema appears, as a rule, and when it does so it is usually moist, whereas this eruption is dry, with a scaly surface. That child sitting opposite, with rosy cheeks, has eczema. If you approach it you will see that the redness of the cheeks is due to an eruption which is dry and scaly. It is a bright scarlet eruption upon a child otherwise with every appearance of good health.

Baby O. has this eruption also upon the back of its head; it is, at a distance, of a bronze hue; there are also pimples or boils upon the occiput, with loss of hair, or alopecia.

Syphilitic eruptions are frequently noticed upon the occiput; probably the heat and rubbing of the parts upon the pillow cause irritation. This baby is anything but a thriving child; its skin is dry and dirty looking, due to pigmentation; it has in the folds of the eyelid and in the groin patches of this peculiar eruption, and I am sure, from its general appearance, you will see enough

evidence at a glance to prove to you that it is not a simple eczema due to gastric disorder or strumous diathesis.

You will frequently have to make your diagnosis from what you observe in these cases, as a history of inheritance is most difficult to obtain. At times corroborative evidence will accumulate from the queries you have instituted after many visits, such as previous miscarriages, rheumatic pains, sore throat, or alopecia in the mother, or unsteadiness of habit in the father. You must be guarded in the expression of your views, but at the same time act energetically in your treatment, if you think you have sufficient evidence of your diagnosis, notwithstanding the most emphatic denials of the parents. We have seen her children, Baby D. and Baby O., break out with the primary manifestations when four months of age, after vaccination with *bovine* virus; a circumstance that might stagger a physician in private practice, after using what he knew to be uncontaminated humanized lymph.

Apart, then, from all history from its parents, you may recognize an infected baby, first, by the snuffles or "cold in the head" at birth. This is not a transitory coryza, but a protracted chronic ozæna, from the onset. If this child be extremely syphilitic, the other evidences may rapidly follow—roseola, the condylomata at the anus, the symmetrical, impetiginous or eczematous eruptions on the buttocks, perhaps with papules, some of which will undergo ulceration, with red, fiery edges covered with gray secretion, the whole having a copper-colored tint.

The child's nutrition is impaired, its skin is harsh, its circulation is poor. At times the finger nails show cracks at their matrices, or dactylitis may develop. The only bone lesion that you will usually note is the want of closure of the fontanelles, though at times cases will present themselves with joint lesions.

Pemphigus upon the palmar or plantar surfaces may be noted at birth or shortly after.

But in those cases which develop late, faulty inheritance may not show itself; the child may be, to all appearances, robust for some months after birth, as in Baby M.

The mucous membranes should always be carefully examined, for fissures at the mucocutaneous attachments, at the angles of the mouth, or mucous folds; these are pathognomonic.

As to the *treatment* in these cases, I generally place the mother on anti specific treatment, if the infant still receives her milk; in this way sufficient of the drugs will be absorbed to produce speedy amelioration of the symptoms. When the little patient has been weaned we order it small doses of iodide of potassium and mercury, in the meanwhile watching our patient carefully, in order that the first mentioned drug may not produce irritation of the gastro-intestinal tract; in a short time the system will tolerate these drugs, when we may cautiously increase the dose.

The local manifestations require the same treatment as similar lesions would receive in an adult.

The prognosis, as a rule, is good, where treatment is instituted early, and we can assure the parents of a favorable termination except in those unfortunate cases in which the inherited poison has been overwhelming in severity, as we saw in the case of Baby D.

Pulmonary Atelectasis.

Let us study the history of the post-mortem specimens before us.

At our last meeting we examined baby E., whose short history was given us by Dr. Charles W. Kollock, resident physician.

The age was supposed to be one or two months. It was a "foundling," picked up in the street, and consequently we judge that it has passed through all the trials incident to exposure, deficient nourishment, and bad treatment.

The history of its complaint was rather uncertain; there was nothing very definite about it to attract attention, except debility and a slight cough. The cough was accompanied by some rapid and inefficient breathing; fine mucous râles were heard throughout the lungs.

You may remember a feeble infant in this ward, an eight months' fœtus, in fact, prematurely born, as its mother was dying from phthisis, which we studied together a few weeks ago. This child presented all the symptoms and physical signs of pulmonary atelectasis. It died in a few days, and no post mortem was obtained. I call your attention to the similarity of these signs in these two cases. In the case before us, the right apex posteriorly showed dullness on percussion, extending to the lower portion of the scapula, and then separated from complete liver dullness, by a line of marked tympanitic resonance. At the apex, the dull note amounts to absolute flatness; and this was noticeable upon the other side, though not to so marked a degree. By placing the broad hand across the back, and noting the respiratory and vocal fremitus, we remarked the absence of a distinct vibration, which would be diagnostic of the consolidation from any form of pneumonia.

The auscultatory signs failed to show tubular breathing; a feeble respiratory sound was heard, gradually increasing, and accompanied by mucous râles, as we descended.

There was no fever; there was feeble, shallow respiration; there was, seemingly, no pain.

At the time of the examination I called your attention to the general feebleness of the child, its rapid and very weak pulse, and also the fact of the insufficient aeration, which, no doubt, failed to show itself by venous engorgement, as the child was a negro; still, the mucous membranes were darker than normal.

We have seen several cases of plastic pleurisy in infants, and verified our diagnosis in the post-mortem room. You noticed that it was a condition usually secondary, also that it occupied the pleura, especially that of the back, throughout its extent, and was not limited to the apices alone.

We found it occurring with measles and pneumonia, and in one case, with extensive tubercular disease, affecting not only the lungs, but also the serous membranes of the brain.

We then concluded that our little patient was

suffering from pulmonary collapse, and it was placed upon the following treatment: A hop poultice was ordered to envelop the whole chest, and quinia sulph., gr. ss, in suppository, twice daily. For the cough I ordered syrup of ipecac in liq. pot. citrat. Whisky, f℥ ss, in milk, was given in divided doses during the day. As the bowels were loose and the evacuations greenish in appearance, I ordered pulv. rhei, gr. ¼, sod. bicarb., gr. j.

Three days afterwards I was sent for, and found the little patient breathing very quickly, respirations shallow, face twitching, eyes alternately fixed and rolling. I noticed that the skin was excessively hot, the thermometer in the axilla registered 107⅘°. I immediately ordered the child to be placed in a bath of 100°, which reduced the temperature to 104⅖° ; cold cloths were also applied to the head.

After this the child appeared to be somewhat relieved; at intervals the mouth and eyes would twitch slightly, no regular convulsion, however, taking place. The muscles of deglutition seemed to be paralyzed, as it could not swallow. It continued in this condition for two hours or more, when the temperature again began to rise, and the bath was repeated. Death occurred about an hour later.

The post mortem revealed the following conditions: Brain was intensely congested, but no effusion was seen. Lungs: collapse, or atelectasis at the right apex and left base. No consolidation. The remainder of the lungs were strictly normal. Larynx and trachea slightly congested. Heart normal; a clot was seen in the right and left ventricles. The pericardium contained an effusion of a light straw-colored fluid, about one fluid ounce. Liver slightly fatty; spleen normal; kidneys normal; intestines normal.

Medical Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, September 7th, 1882. Vice President J. Solis Cohen in the chair.

Case of Carcinoma Mammæ,

presented by Dr. C. B. Nancrede, for Dr. Chas. Wirgman.

Mrs. Josephine M., æt. 48 years, married at 23, the mother of three children, the last born sixteen years ago. Had nursed all her children, but the last died from marasmus, owing to the small amount of milk the mother had all through lactation. Lactation was free after the first two confinements. She never had had any abscess of breast, traumatism, or eczema of the nipples, although she had always experienced pain and uneasiness in the right breast when nursing. There was no trace of carcinoma in family history. A sister had had enchondroma of one of the metacarpal bones. When young the patient had suffered from dyspepsia, and on one occasion had had an attack of hæmoptysis. Of late years Mrs. M. has grown very stout, although never robust nor strong. About the middle of June, 1882, she first noticed a lump in her right breast, at its upper inner quadrant, about the size of a hen's egg. A few nights previously she had been awakened by a severe, lancinating pain in the right breast, but experienced no further inconvenience. She paid no attention to it. The mass did not seem to grow till handled; an exploring needle had been inserted, when the growth became softer, much larger, painful, and the skin and super-adjacent veins rapidly showed marked changes. I saw her, August 6th, 1882, with Drs. Wirgman and Hearn, when the only additional points to be noted were that the growth was freely movable, with the breast, upon the chest walls, and that a mass the size of a pigeon's egg could be felt in the axilla, under the outer margin of the pectoralis major muscle. Dr. Wirgman removed the whole breast, by two semicircular incisions, opened up the axilla, and removed all the glands up to the clavicle. This operation again emphasizes what Dr. S. W. Gross has specially insisted upon, viz., that although the axillary glands may appear, before operation, uninvolved, when the axilla is opened, numbers are often found enlarged. This accords with my own repeated experience. Although slow in healing, the case has done well since operation.

This case presents special points of interest, which I shall now dilate upon. In the first place, its history and appearance were eminently suggestive of a rapidly forming sarcoma, which was either cystic, or what at once suggested itself to me before etherization, one into whose substance hemorrhage had occurred. Upon careful examination under ether, the discovery of the enlarged gland at once suggested the strong improbability of sarcoma, which view I abandoned. After the removal, the microscopic appearances once more threw doubt on the diagnosis, as there was, for at least one-half, if not more, of the circumference of the growth, a distinct appearance of a capsule, and, as I had surmised, the tumor had been broken down by a hemorrhage into its substance. Subjected to microscopic examination, the specimen was again puzzling, since sections of the first piece, embedded, showed in every portion of their extent, with a very few slight exceptions, small spindle-cells, of a connective tissue type. Dissatisfied, I embedded a second piece, sections of which revealed a typical carcinoma, of the soft variety. This again illustrates what I have many times insisted upon in this Society, viz., that either very large sections of growths should be made, as Dr. Seiler advocates, or sections from several and varied portions of the morbid mass should always be carefully examined. Dr. Tyson said that the presence of a capsule seemed to be clearly demonstrated.

Recurring Carcinoma of Mamma and Axillary Glands.

Presented by Dr. C. B. Nancrede.

The patient, Mrs. F., æt. 37 years, from whom the specimens were removed, before the discovery of the primary tumor, about 18 months back was in perfect health, although, from pecuniary losses, she had undergone much mental anxiety since the Chicago fire. Hearing a vivid account from a friend, of another case of carcinoma mamma, her mind became deeply impressed, and shortly after she discovered a growth in the

upper inner quadrant of the left breast, which continued to grow until it had attained, at the time of the first operation, to the bulk of a small orange, viz: one year after her first discovering it. She lost much flesh from the time of the discovery of the growth; she had never suffered from any form of traumatism, had had no eczema of the nipple, and although she had borne one child a number of years back, and had suckled it, had never had sore nipples. There was nothing that could be fairly construed as a hereditary history of carcinoma. The primary operation had consisted in a removal of part of the breast. In less than two months after this a small nodule appeared in the cicatrix, while the axillary glands began to enlarge rapidly. On July 8th, 1882, I saw her, in consultation with Drs. R. R. Taylor and Harlow, when I found that there was a small nodule in the middle of the original cicatrix, while the axilla was occupied by the mass of indurated glands which I here present. The growth partially embraced the axillary artery, since, when the former was compressed, the radial pulse was decidedly affected. Not being allowed to remove the whole breast, I freely excised the small recurrent growth, and after a tedious dissection, removed the axillary tumor, laying bare the artery and vein for a space of over an inch, clearing everything out to the clavicle, and distinctly recognizing the coracoid process of the scapula. Although not the place for a clinical discussion, I cannot refrain from emphasizing the importance of the thoroughness with which this axillary dissection should be performed. Not a single gland should be left, enlarged or not. Properly conducted there is hardly any hemorrhage, a vessel rarely requiring ligature. This case was treated on the Listerian principles, but with a spray of acetate of alumina, and the wound was dressed with the same. There was no inflammation, heat, pain, nor subsequent induration, and if I remember rightly, the case required but five dressings, until the wound became superficial, and fewer would have been necessary had perfect coaptation been secured. One or two points where stitches made marked tension, showed a surrounding skin flush, which disappeared on the removal of the stitch; immediately contiguous to this the wound edge looked as if made but a few minutes before, thus showing that the irritation of tension was the trouble, which, as before said, very rapidly disappeared when the deeply imbedded stitch was cut. The temperature rose to 100.2° at the end of the first 24 hours, after which it remained under 100°. The pain after the removal of the pressure of the bottom stitches, amounted practically to nothing, according to the patient's own statements, and it will be remembered that she had the experience of a former operation for comparison. I believe that this is the first case where acetate of alumina has been used in this city, in a Listerian operation, and its success disposes of the absurd statement that carbolic acid is Listerism.

Carcinoma of Stomach.

Presented by Dr. J. H. Musser.

The clinical aspects of this case were so definite, that when this man applied at the medical dispensary of the Hospital of the University of Pennsylvania for treatment, early in April, of this year, it was without difficulty that malignant disease was diagnosed.

He was a farmer, of good habits, 53 years old, and previously in good health. For the last six months he had suffered from "weakness of the stomach" and general debility, which prevented him from working. He had lost much flesh, and had constantly a severe sickening pain in the epigastrium, extending to the upper part of the lumbar region, which became much worse within an hour after eating; appetite was poor, tongue clean and pale, bowels constipated, with troublesome flatulence. A tender, non-pulsatile, movable tumor, extended across the epigastrium, from the margin of the ribs on one side, to a similar site on the other, one inch and a half above the umbilicus. He presented an anæmic, cachectic appearance.

Dr. H. Plank, of Morgantown, took charge of the case, and wrote me, April 21, 1882, that he was much benefited by the treatment instituted, but was confined to bed, from sheer exhaustion. June 5, the doctor reported increased weakness, and emaciation, and that the pain had extended along the left side to the same shoulder. He took but little nourishment, and he commenced vomiting (June 10,) undigested food, mucous, grumous, purulent matter. He died June 20, of exhaustion, after a nine months' illness.

Dr. Plank kindly sent me the specimen I here present. One fourth of the pyloric end of the stomach is involved in the growth, which extends along the greater curvature for four inches, along the lesser two inches, and completely encircles the organ. The stomach walls in front of the disease were dilated, the muscular coat being hypertrophied, and the mucous membrane congested. The mass encroached upon the calibre of the viscus so as almost to occlude it. The tumor consisted of three nodules, one of which was ulcerated on its mucous surface, and presented the appearance of a scirrhus. The glands in the lesser omentum were diseased.

Spindle-celled Sarcoma of Thigh.

Presented by Dr. J. Henry C. Simes.

The patient from whom this specimen was removed presented himself for admission to the Episcopal Hospital on Aug. 30, '82. He is 60 years old, an Irishman, and gave the following history: Two years ago he first noticed, at the lower and outer part of the thigh, a small swelling, which grew rapidly to the size of a hen's egg, when it was removed. Shortly after the wound had healed a second tumor was noticed in the cicatrix, having the same character as the previously removed growth. This was also removed by operation, and again, in a still shorter interval, a third similar growth was developed in the same locality, which was also removed by the knife. When admitted to my wards there was found, upon examination, at the lower and outer part of the thigh, a linear cicatrix about two inches long, beneath and adherent to which, as well as to the

surrounding integument, was seen a tumor as large as a walnut, movable upon the deeper tissues, painless, dense, and irregularly nodular. There was no glandular enlargement observable. No other tumors were present. The tumor was readily removed, being adherent only to the overlying skin, which was included in the incisions. Microscopic examination showed that the neoplasm consisted entirely of large, spindle-shaped cells, which contained large, oval nuclei.

Editorial Department.

Pain at the Heart and Palpitation.

Dr. J. Burney Yeo publishes a very valuable lecture in the *Lancet*, on this subject. There are few symptoms that we are more frequently called upon to relieve than pain at the heart and palpitation, and in nine cases out of ten these spmptoms are referable to dyspeptic conditions or to hysterical states. Pain anywhere in the left side of the chest, and often pain in the epigastric region, are commonly spoken of by the sufferer as "pain at the heart." While this pain may have nothing whatever to do with the heart, yet I have been somewhat surprised, while carrying out the method of exploration about to be described, to find in how many of these cases, where "pain at the heart" has been complained of, there has been quite unmistakable tenderness on pressure with the tip of the finger over the seat of the apex beat. The following different causes of thoracic pain may be incorrectly referred to the heart: Intercostal rheumatism, intercostal neuralgia, costal periostitis, of syphilitic origin, pleuritis, pain and discomfort attending flatulent distention of stomach. Under this last head I would mention one of the effects of abuse of tea, coffee and tobacco. Either of these, but especially tea, will frequently give rise to a form of dyspepsia, associated with vague pains in the chest, not always limited to the region of the stomach, but often referred to a spot higher up on the left side of the chest, and commonly accompanied with disturbed cardiac action and a nervous apprehension of the existence of heart disease. Finally, there is a pain usually spoken of as "sub-mammary," which you will often hear complained of by young women who are anæmic, or who suffer from menstrual derangement. It is frequently associated with tenderness on pressure over the ovaries, especially the left one. These several varieties of pain can be recognized by looking for the well known characteristic signs of each.

Dr. Péter considers the following method of examination of equal importance with that of auscultation or percussion. You must bear in mind that the cardiac muscle in the healthy state is insensible. (The method I am speaking of consists in simply pressing with the tip of the index finger, and with moderate force, along the intercostal spaces corresponding with the præcordial and præ-aortic regions, and generally on the several points in the thoracic and cervical regions which are in relation with the organs whose sensibility we wish to explore.) Patients who suffer from chronic myocarditis often complain of a dull, heavy, almost constant, deep-seated pain in the region of the heart, aggravated at times under the influence of emotion or any considerable effort, and shooting then into the back. In such cases pressure with the tip of the finger along the intercostal spaces in the præcordial region, close to the sternum and over the ventricle, will constantly afford distinct evidence of the existence of a morbid sensibility of the cardiac muscle. The patient will often complain of severe pain when pressure is made over certain definite spots. In these cases the pain is especially felt in the fourth and fifth left interspaces when the surface of the ventricle is in contact with the wall of the chest, and also over the cardiac apex. And pressure over the apex will remain painful even after the pain has disappeared, under suitable treatment, from the other points.

Dr. Péter has noticed that in middle-aged men who suffer from the excessive abuse of tobacco, pressure over a very limited point on the third left intercostal space, near the sternum, will give rise to acute pain; and he thinks this point corresponds with the auriculo-ventricular groove, and that this strictly localized pain is probably due to a morbid condition of the ganglion of Remak, consequent on tobacco impregnation.

Pressure over the præ-aortic region is also of special importance in exploring the sensibility of the cardiac plexus and its tributary nerves; but it is necessary to be careful not to press too strongly over this region, as an attack of angina has been induced by neglecting this precaution.

Dr. Péter mentions that pain in this situation is very significant of lesion of the aorta affecting the whole thickness of its walls. In such cases Dr. Péter has found, and I believe, been able in several cases to corroborate his statement to a certain extent, that there is tenderness on pressure over the pneumogastric, at the root of the neck, especially on the left side, and in other parts of its course.

Now, there is one clinical fact you may accept undoubtedly, and that is, that complaint of cardiac pain is much less common in mitral than in aortic disease.

Several illustrative cases were exhibited.

Successful Transfusion of Blood.

In the *British Medical Journal*, Dr. William Walter relates the following case:—

On June 8th, 1881, Mr. Saberton, of Ardwick, was sent for to attend a patient, aged twenty-two, in her second confinement. On reaching

the house, he discovered that the child had been born and the placenta expelled at least ten minutes previously, and that the labor had not extended over more than a couple of hours. The condition of the patient was most critical; she lay in a pool of blood, her face deadly pale, and the pulse scarcely to be felt. Her abdomen was distended with an enlarged uterus, that reached almost to the ensiform cartilage. Not a moment was lost in firmly grasping the fundus uteri, and in resorting to the ordinary means of checking hemorrhage, including the free administration of ergot; but no contraction ensued until the hand had been introduced into the interior of the uterus, and the clots which filled the uterus thoroughly removed; and these, when lifted into the chamber-utensil containing the placenta, completely filled that vessel. The uterine contraction was soon followed by dilatation, with a return of the hemorrhage; and for an hour contractions and dilatations followed one another at short intervals, with repeated recurrence of hemorrhage. During this time, pressure over the fundus was maintained, and occasionally the hand was reinserted into the cavity of the uterus and the organ manipulated bimanually.

In the course of another half hour, the hemorrhage ceased, and the uterus remained firmly contracted. Notwithstanding this, the patient showed no signs of coming out of her collapsed condition; and it was evident that, if it were possible to save her life, it could only be by transfusion of blood. For this purpose I was sent for, and reached the house two hours after the labor, and half an hour after the arrest of the hemorrhage.

I found the patient lying still and unconscious; her face and lips were blanched; her eyes had assumed that dull and lifeless appearance which only death, or its near approach, can produce. Respiration was scarcely perceivable, and the pulse could only at intervals be felt; her extremities were cold and clammy, but the uterus was firmly contracted. It is needless to say I had no hesitation in concurring with the opinion already expressed as to the necessity for transfusion, and placed in readiness Dr. Macdonnell's transfusion apparatus. The husband of the patient cheerfully consented to supply the necessary blood, but her mother begged that she might be the donor; and to this request we acceded, as the condition of her health was extremely good. The mother's age was forty-two; and it is worthy of record that her next menstrual period, which should have occurred two days later, did not on that occasion appear.

While Mr. Gwatkin and I were performing venesection on the mother in an adjoining room, and before we had time to collect more than four ounces of blood, Mr. Saberton acquainted us that the patient was apparently lifeless. Accordingly, Mr. Gwatkin took charge of the defibrination, and I hurried back to the patient's bedroom to prepare her arm for the reception of the blood. The difficulty one had to contend with in finding a vein was very great, but at last one came into view; and, the skin over it being divided by transfixion at right angles to the course of the vessel, a probe was readily passed underneath the vein, so as to isolate it from the surrounding tissues. A small opening was now made in its walls, and the silver nozzle of the tube was introduced a short distance into its interior. The blood was not allowed to flow along the tube until it appeared at the opening in the side of the nozzle, whereby one knew that no air existed in the tube. The nozzle was then introduced further into the vein until the opening in its side was completely hidden from view; and the patient's arm, together with the apparatus, were elevated, in the hope that the blood would then be forced along by gravitation; but such was not the case, and it was necessary to aid in its propulsion by repeatedly compressing the dilated portion of the tube.

In from ten to twelve minutes all the blood (nearly four ounces) was injected, and the patient's arm being bound up, we anxiously watched the results of the transfusion. Almost immediately, respiration became distinctly visible and audible, without the occurrence of any dyspnœa; the pulse at the same time returned to the wrist; and, in the course of a quarter of an hour, the insensibility gave way to consciousness, and she was able to recognize her friends. Her convalescence was steady and uncomplicated; and within a month she was able to walk out of doors.

In conclusion, I may remark how generally it happens that, in the cases of *post-partum* hemorrhage which would be most benefited by transfusion of blood, a transfusion apparatus is not procurable until too late to be of service to the patient; and I cannot too strongly recommend a glass pipette, with tube, should be constantly carried in the obstetric bag, for sudden emergencies.

Troublesome Labors.

Dr. W. Howard Cory reports the following cases in the *British Medical Journal.* They will carry comfort to others who may have similar trying experiences:—

Case 1.—On July 1st I was called in to attend a Mrs. P. in her first confinement. I found the patient reclining on the bed in great agony. The os uteri was fully dilated; and I was much puzzled at feeling, instead of a fœtal head, a large, soft, fluctuating mass. Being anxious about the case, I sent for my partner (Mr. Orfend of West Town), who, after making an examination, came to the conclusion that some portion of the child's back was presenting, and recommended turning. I therefore administered chloroform; and, after about one hour's manipulation, my partner succeeded in extracting, with some difficulty, a male child (dead), with a hydrocephalic head. In this case the presentation was natural; but the state of the head caused the deception. The mother in this case made a rapid recovery.

Case 2.—On July 30th I was sent for to attend a Mrs. B. in her second confinement (her first child having been born six years previously). The nature of the case necessitated the use of forceps; but it was only after using considerable force that I was enabled to bring the head of the child into the world, and I awaited the natural expulsive powers of the uterus to com-

plete the delivery. I was surprised, however, to find that, notwithstanding the sharp pains the woman continued to experience, the body of the child still remained firmly fixed. As several minutes had elapsed since the birth of the head, and believing that the child would be sacrificed, I placed my hands on each side of the head (I was quite unable to hook my fingers under the shoulders), and, after using some force, succeeded in completing the delivery. The child, when born scarcely showed any signs of life, but was quickly restored by a little shaking. The woman, with the exception of a lacerated perineum, is doing well. In this case the child was a very large one.

Case 3.—I was called a few days ago to visit Mrs. W., aged 26, a primipara. The midwife who attended had not been able to manage the case. On making a vaginal examination, I found the head resting on the perineum. Thinking to expedite delivery, I put on the forceps; but, to my surprise, found, on making traction, that the head appeared to slip from between the blades, which were withdrawn on several occasions without success. After some perseverance, however, I managed to get the blades fixed; and with some trouble delivered a child with a very elongated head, from before back, much flattened from side to side, and with a tendency to hydrocephalus. The mother and child are doing well. In this case the head of the child was particularly narrow across the parietal region, while it was much swollen over the frontal and occipital regions; and it was owing to the blades being placed over the former position that the head slipped away whenever I made traction.

Case 4.—Mrs. H., aged 32, was seen by me on August 13th. The patient had been confined twice previously, of still-born children. The labor, although very severe, was natural; but, as the woman was becoming worn out with pain, I applied the forceps, and extracted what appeared to be a dead child. Much to the amusement of the nurse (who appeared to think it absurd on my part to do so), I endeavored to restore animation in the child, by Sylvester's method. I was rewarded, in about half an hour, with complete success. At the present time, the mother and child appear to be doing well.

Sub-luxation of Fourth Cervical Vertebra—Recovery.

Mr. Barwell reports the following case in the *British Medical Journal*:—

M. C. C., aged 63, was brought to the hospital on June 6th, 1882, by policemen. It was stated that, in a fit of despondency, the man had fastened a rope to some firm object in his room, had tied the other end round his neck, and thrown himself from the window; the fall was eleven or twelve feet. He was seen to fall, and was immediately released.

Mr. Pittard, house surgeon to the hospital, found him quite unconscious, breathing with some difficulty, and very slowly. The limbs were perfectly flaccid: no sign of sensation, no reflex action, could be produced by pinching them. The only external wound was a broad but slight abrasion, extending from behind the angle of the jaw to the middle line, about the region of the cricoid cartilage. On examination behind, Mr. Pittard found evident displacement of parts. He at once sent for the surgeon, who shortly afterwards arrived.

Mr. Barwell found the man lying perfectly still, but the limbs were not entirely flaccid; they did not, at the time of his examination, when raised, fall quite inert on the bed. Also, when the man's hand was lifted, his elbow supported by the mattress, and he was told loudly in his ear to keep it so, there was an evident effort to obey, although it sank slowly down. The pupils were contracted, but moved slightly to light. The breathing was between 17 and 20 per minute, the pulse was 24. The state, therefore, had evidently improved in the three-quarters of an hour since his admission.

On tracing the line of the cervical vertebræ upward, the seventh, sixth, and fifth were in their normal place, but then there was a sudden gap. Indeed, the fifth could be felt unusually distinctly, the fourth and third not at all, the upper part of the cervical spine being in a line much more anterior than the lower part; while the parts covering it were very soft and yielded easily to pressure forward. Nevertheless, since the breathing was normal, or nearly so, and since the man's condition was improving, Mr. Barwell would not undertake any attempt at reducing the displacement, but ordered him to have only a very low pillow, to which the head was to be secured by bandages.

June 7th. The man passed a quiet night, but it was impossible to say whether he really slept, or remained simply semi-conscious. The temperature was 101.5° At this date, he complained of pain at the back of the neck, but not very much; he was greatly troubled by a pain round the lower ribs, what he called "an iron hoop round him."

June 8th. There was no material change; the sense of constriction at the lower part of the thorax continued, but was less severe. The upper part of the neck behind was less yielding.

June 9th. The cord-like feel was now slight; the neck seemed assuming a more normal position.

June 11th. There had been no further evidence of spinal injury.

June 13th. The cervical vertebræ had very nearly resumed their normal position, being no doubt, as Mr. Barwell explained, slowly reduced by the elasticity of the intervertebral fibro-cartilage.

June 16th. The man was virtually well, and the neck normal in shape. He was kept in the hospital a few days beyond the above date, as it was thought better not to risk the effect of his being brought before the magistrate; but he was quite well, and had sustained no permanent injury.

Surgical Accidents in the Insane.

Dr. N. Schüle, of the Institution for the Insane, of Illenary, gives a history of surgical accidents as they happened among the insane who came under his charge. The *Deutsche Medizinal*

Zeit. (August 3d, 1882) mentions a few of the more interesting cases as they are published in the *Allg. Zeitsch. f. Psych.*, XXXIX, 1. Schüle reports only such cases where the insane inflicted purposely the injury on themselves, and omits all cases which ended fatally; he reports, therefore, cases of a quasi monomania for self-inflic tion of surgical injuries.

Depilation in consequence of automatic actions in anæsthetical idiots or induced by hallucinations. One patient tore out the hairs of his beard singly, in the supposition that he would become an angel and receive for each hair a feather.

Then cephalhæmatoms, in consequence of hitting the head. Not rarely, nails, broken pieces of glass, and needles were pushed under the scalp. One melancholic insane drove a nail through his temples. Others tore out the eyelashes, or rubbed sand into the conjunctivæ. In consequence of continuously rubbing his eyes with his arm sleeves, one insane was attacked by double-sided iritis, cataract, and at last, perfect blindness. Another pushed some long, sharp-pointed pieces of wood into his ear passages, till otitis interna, and at last deafness, set in. In one case an insane, while under hallucinations, cut his tongue off totally, at the root, with an extremely dull pocket-knife, the edge of which was broken all over. The enormous defect gradually healed by granulations, which pushed themselves so far forward that at last the speech became intelligible again.

Very rich is the chapter on swallowing of all kinds of substances. One patient tore a living toad into pieces with his teeth and swallowed it. Glass was swallowed often, and without any damage. The passages in one such case looked as if they were covered with trachyta.

One chronic maniac tore, during one night, several yards of a thick woolen carpet off, and swallowed the same *in continuo*. A coprostasis was the consequence, and with the aid of fingers and a long forceps the corpus delicti appeared, gradually unrolling itself, like a huge ribbon.

In another case the 2-3 ctm. thick and 15 ctm. long handle of a spoon was swallowed. Some months later some small pieces of the same, thickly covered with blood, made their appearance in the fecal discharges. The hemorrhage was great, and accompanied by severe colicky pains. About a year and a half later the rest of the handle was extracted from the bottom of a large abscess in the ileo-cæcal region. The wound healed without leaving a fistula. It must be remarked, that the gravest injuries of such character generally healed far more favorably than would have been the case in healthy persons, had they met with similar accidents.

The nipples of the breast were frequently tied off by female insanes. Very often injuries are inflicted on the genital organs and the anus.

One patient extirpated his testicle, having lost the other in a battle. Others again amputated the penis. One female idiot has pushed a comb so far and with such force into the vagina, that its teeth penetrated the rectum and the mucous membrane of the same. Most of the injuries were committed during the night, and mostly with instruments of which nobody would have had any idea that they ever could be made use of for such purposes.

A Rare Form of Senile Gangrene.

Dr. Joseph Bell thus writes, in the Edinburgh *Medical Journal*: W. H., aged 75, a very healthy, temperate, contented old man, of spare habit and fairly healthy arteries, was sent into hospital, under my care, by Dr. Bentley, of Kirkliston, on 17th January, 1882. The second toe of his right foot was black and evidently dead. He said that a few days before admission he had met with an accident, the iron plate of a retort having fallen on his foot. The whole foot was red and swollen; not much pain, and no constitutional disturbance. On 24th January the dead toe was nipped off with scissors, no blood being lost; the tendons alone required division. The bones were noticed to be curiously macerated, as if they had lain long in water. In another fortnight the third toe, which on admission had been alive and healthy, except for a slight redness, also died and was lifted off, the bones being macerated, and this time the tendons also destroyed. The resulting gap left by the removal of these two toes was large but painless, and suppurated freely, with little odor. Up to March 10th all went well, and the wound was nearly healed. The extremities of the second and third metatarsals had separated from their shafts at the epiphyseal junction, and were lifted out with ease.

On March 10th, however, without either pain or elevation of temperature, a dark blush was noticed all over the great toe, which had hitherto looked healthy, and half way up its metatarsal bone. The circulation in this area was exceedingly sluggish, the finger leaving a white dimple on pressure, which took several seconds to refill with blood. After two or three days of doubt a bulla was noticed to form just on the dorsum of the metatarso-phalangeal joint. This bulla rapidly raised the cuticle to the size of a florin, and, being cautiously cut into, showed the true skin, not, as is usual in such cases, either shriveled up or sloughing, but as if it had melted into a shreddy, pultaceous mass, and this involved not only skin, but cellular tissue, ligaments and periosteum, for by March 20th, without any displacement of parts, suppuration, or odor, the proximal phalanx and metatarsal head were both exposed, as if thoroughly macerated, and lay loose in this pultaceous mass. The edges of the ulcer or cavity were everted and undermined, as if by a gumma, were of a pinky redness, but exhibited no granulations or any attempt at repair. Having watched many cases of senile gangrene to death or recovery, and having had two or three cases of gangrene from embolism also, for months, under careful observation, I am quite familiar with the usual processes of separation, whether moist or dry; but I have never seen or read of any case in the least resembling this one, whether in its rapidity of maceration of tissue, its curious cessations or intermissions, its freedom from pain, and apparently trifling effect on the constitution.

The treatment was purely expectant, no interference that could be avoided, absolute rest in bed, milk diet, which was well borne, and locally

keeping the limb at an equable temperature by cotton wadding (carbolized) and marine lint, to sop up discharges.

The result has been remarkable. To-day, 30th June, the apparently dead and macerating heads of metatarsal and first phalanx have recovered themselves, granulations have formed, and now the wound has closed, with the exception of a line of granulations about a quarter of an inch long and one-sixth of an inch broad, under which can be felt a thin scale of carious bone. The old man is quite well, and goes home in a few days.

Syphilitic Re-infection of Husband and Wife.

The London *Medical Record* says that Dr. C. Pellizzari, of Florence, reports the following case (*Lo Sperimentale*, March, 1882). About the middle of December, 1880, a healthy-looking married man, about fifty years of age, consulted Dr. Pellizzari for phimosis, with discharge from beneath the prepuce, and enlarged inguinal glands, which had followed a suspicious intercourse some days before. Induration of the corona subsequently became well-marked, and in due course a macular syphilide appeared, having been preceded by osteocopic pains. The man, on being told that he was suffering from syphilis, remarked that he had suffered from venereal sores ten years before, and had also at that time infected his wife, who, a few months afterwards, during pregnancy, had suffered from general debility, headache, and moist papules of the genital organs. Her child also showed signs of syphilis soon after its birth. Further and positive evidence of the wife's infection was obtained from Professor P. Pellizzari, who had attended her in 1873, for syphilitic perforation of the septum nasi. On February 2d, 1881, she was examined by the author, and found to have an indurated sore of the fourchette and enlarged inguinal glands; a month later a maculo-papular syphilide appeared. The two attacks of syphilis in the case of the wife are thus clearly proved; but as regards the husband, the evidence of the former attack appears to rest on the fact stated by the man himself, that he had ten years previously contracted venereal sores after suspicious intercourse, and on the proof of subsequent syphilis in the wife and child. The husband appears to have suffered so slightly on that occasion, that he did not think it necessary to obtain medical advice. In connection with this it may be mentioned that, in the later attack, when he was under the author's observation, the general symptoms were mild in degree; while the wife suffered severely from recurrent eruptions, nodes, etc., although she had been almost continuously under treatment during the preceding ten years.

An Attempt at the Operative Treatment of Ozæna Fœtida Simplex.

The Edinburgh *Medical Journal*, quoting from R. Volkmann, in *Centralb. für Chir.*, says:

During the past year I have attempted, in two cases of ozæna fœtida simplex affecting young girls, to procure a better ventilation of the nasal cavity by removing the whole of the inferior and the greater part of the middle turbinate bones; and in both instances a distinct success was the result of the treatment. The penetrating fetor, the symptom which, above all, induced the patients to seek surgical aid, disappeared under the use of disinfectant and astringent injections, although these had been used previously to the operation for months, and years, without any effect. The patients afforded examples of what I have often observed in cases of ozæna fœtida simplex, viz., the nose congenitally narrow, accessible only to the smallest instruments, the passage of which was the signal for hemorrhage; the vomer bent, and the turbinate bones on one or other side almost completely obstructing the passage. In the one case there was considerable injection and velvety swelling of the mucous membrane, with much discharge. In the other there was present the cicatricial shriveling, with formation of horny crusts, to which so much attention has been lately directed. I am far from asserting, or even daring to hope, that in this extirpation of the turbinate bones we have found a sovereign remedy for ozæna. As to the best method of performing the operation I cannot yet speak with certainty. At the present time I would recommend the following plan: A strongly concave gouge of the largest available size is introduced into the nostril and pressed backward twice or thrice, in the direction of the middle meatus, *i. e.*, pretty nearly parallel with the horizontal plate of the hard palate. As the gouge is pressed backward, its cutting edge should be made to act first inward and then downward. The semi-detached fragments of bone must now be removed with polypus forceps or other suitable instruments. If bleeding be severe the meatus may be plugged.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"The Disease of the Scythians" is a study on an interesting and little known subject, by Dr. William A. Hammond. It was reported by the Greek writers that the Scythians, owing to being so much on horseback, diminished and sometimes completely lost their virile powers. The same condition was noted by Dr. Hammond among some Indian tribes of the far West, although there it seems to have been at times artificially fostered, for ceremonial purposes. The subject is one still quite obscure, and merits further investigation.

——The treatment of procidentia of the uterus has generally been unsatisfactory. In a reprint from the *Trans. of the Med. Society of Penn.*, Dr. E. E. Montgomery describes a case completely restored by an operation which is a modification of that recommended by Le Fort, and appears to have positive advantages over any hitherto employed.

THE

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A MEDITATION ON MEDICAL COLLEGES.

Just how many medical colleges there are in the United States, we do not know, not having counted the announcements of new ones for several weeks. Of one thing we are certain—considering the kind of colleges they are, for the most part, there are too many of them.

A medical college, to do any real good, must have a number of extrinsic advantages. It requires a city of considerable size, from which to draw sufficiently varied clinical material; it must be in a locality where able men can obtain a good living from their practice, as otherwise they will not come to it as teachers; its organization must not be under the control of one man, nor must financial success be necessary to its existence. This last touches the white. It means that the corporation must be with ample resources to begin with. There ought to be a law in every State prohibiting the establishment of any medical college unless the corporators could show $100,000.00 paid up capital and an agreement to fund all profits for ten years!

A poor man is generally despised, whether he deserves it or not, but a poor medical college always deserves it. No professional men have a right to band together to set on its legs an impecunious institution. The history of all such enterprises is a long list of jealousies and backbiting, degrading competition for students, wretchedly superficial instruction, deficient anatomical and clinical material, servility in lecturing, a sham of an examination, and a lot of grossly incompetent young men turned out to prey on the community as doctors.

If by accident an honest man is on the faculty and exposes this miserable history, then comes a scene of slander and recrimination, which stains the whole profession with its inkiness.

A lamentable example of the kind has been recently shown by the Columbus (Ohio) Medical College. It graduated a man after *three weeks* attending at lectures, and in the face of the remonstrance of at least one member of the faculty. The matter leaked out through the latter, and a vile anonymous attack upon him was made by another member of the faculty, *in the columns of a Sunday paper*, written at his request, it appears, by some attorney of the size for that sort of work.

This happened at the Columbus Medical College. But it is a great mistake to suppose that that college is particularly to blame in this matter. It has been called a "disreputable establishment," but it is not a whit more disreputable than a dozen other colleges, East and West, that could be named. It did what almost all poor colleges, scrambling for a foothold, must do. It is easy enough, said Becky Sharpe, for a woman to be virtuous on five thousand a year; and the intimation she meant to convey, that it was a very different matter on nothing a year, is just as true, and a good deal more so, of a college. Such colleges cannot afford to repel matriculants by getting the reputation of being severe. Then there are always in this country a large body of men who are poor and ill-educated, and yet who want the degree of M.D. These are always on the look-out where they can obtain it at the least expenditure of time, brains, and

money. These are the bawds who are always tempting the poor young colleges to the prostitution of their honor ; and their poverty, if not their will, consents only too readily.

If there is any suggestion by which the establishment of new colleges could be checked, it would be a blessing to have it known and applied. If there is anything in the resources of intellectual toxicology by which we could speedily get rid of a dozen or two of those now living, we should hail it as a boon, and administer it right speedily.

ONE OF THE CAUSES OF SUDDEN DEATH.

For a long time already clinicians have been bothered to see persons die suddenly, either under the symptoms of embolism or heart-thrombosis, or under the symptoms of apoplexy. But when the post-mortem examination was made, to show the embolus or thrombus on one side or the hemorrhagic effusion on the other, no such things were found. Later observations demonstrated the fact, that the only morbid lesion found under such circumstances, was the ossification either of the coronary arteries, or of the cerebral vessels. This, however, seemed not sufficient to account for the sudden death.

Cohnheim, in his new edition of his celebrated lectures on general pathology (Leipzig, 2d edition, Hirchwald, Berlin, Aug. 1882), gives us, at last, an explanation of this fact. He tied the coronary arteries, and found, to his surprise, that without giving rise to any prodromic symptoms of debility of the heart, the organ came abruptly and suddenly to a stand-still during diastole.

We can see now how a gradually progressing sclerosis of the coronary arteries, for instance, will suddenly occlude these vessels totally, and cause instantaneous death. Certainly such cases do not happen frequently, as usually the ossification in one artery goes on more rapidly than in the other, and we have then premonitory symptoms of failure of the heart's action ; but often enough the morbid process progresses symmetrically, and then we have such a sudden death. The same explanation holds good for the similar conditions in the vessels of the brain, *i. e.* the large arteries.

TREATMENT OF SEQUELÆ OF FROZEN EXTREMITIES

The Imperial Russian Kankasian Medical Society mentions, in its protocols, 17, 1882, some of the experiments Dr. Lapatin of Tiflis made, while he was attached to the infantry regiment Eriwan, during the Turkish campaign in Asia Minor, 1877-1878. The soldiers had been greatly exposed to the influences of the extremely cold weather. L. noticed frequently, that after milder degrees of frozen extremities, for years, disagreeable pains and a very annoying pricking in the parts made their appearance from time to time, especially during the colder seasons, and on sudden changes of the weather.

He tried, at first, all the remedies usually employed for such a purpose, but without any permanent success, till he found in some old work a long ago obselete remedy, with the results of which he is very much satisfied. This consists in brushing the parts, preferably with a glass brush, with a mixture consisting of equal parts of dilute nitric acid and aqua menthæ. This is the old Rust's Frozing wash, only that the latter contained aqua cinnamomi instead of aqua menthæ. The parts are brushed over with this, in the beginning once, and later twice daily. After three or four such applications the skin assumes a brown color, becomes dry, and a superficial scab forms, which, when thrown off, leaves a healthy skin. Within one and a half to two weeks the disagreeable sensations, which frequently prevent soldiers from putting their boots on, disappear forever.

We know, from our own experience, however, a far better, quicker and still more reliable remedy, which we have never known to fail, no matter how much the parts may have been inflamed, if only mortification had not set in, and this is copaiba balsam. The same is thickly spread on a piece of linen or muslin, and the affected parts covered with it during the night, and a stocking put over the whole. In daytime

simply some of the balsam is spread over the parts. After one or at most two applications, the redness and all pains cease, and a few more applications do not only remove every residue of it, but they seem to impart a remarkably increased vital resistance to the parts against frostbite, if only common precautions are used. In the several dozen cases that came under our observation, this remedy, so applied, did not fail in a single instance, so that we have long come to consider it a specific in this annoying complaint.

Notes and Comments.

A New Antiseptic.

The *British Medical Journal* gives an interesting account of the discovery of the antiseptic properties of turf mould. It seems that some two years ago a man applied to Dr. G. Neuber, assistant to Professor Esmarch, in Kiel, with a laceration of the soft parts, rupture of the wrist joint and fracture of both bones of the fore-arm. It was dressed at the time with a thick coating of mould from the moor on which the man was at work and a rough wooden splint. When seen, ten days later, he appeared in good health, and when this dressing was removed, the wound was found free from suppuration, in some parts already united by first intention, and in others granulating in a satisfactory manner. It was found that the turf acted as a powerful deodorizer of fecal matter. It has been found to so effectually disinfect excretions from horses, that the same bed can be used for two or three months. The turf mould, reduced to a powder, is enclosed in gauze bags, which have been thoroughly washed in carbolic acid solution. The wound is first washed with carbolic acid or chloride of zinc lotion, or powdered with a little iodoform. The bag is then placed over the wound, over which a larger bag is adjusted, and both are retained in place, and an equable pressure kept up by a gauze bandage. The dressing was used by Esmarch in fifty-five cases, among which were seven resections and osteotomies, five amputations, twelve extirpations of tumors, and two herniotomies. The results were most satisfactory. In thirty-one cases there was no fever at all. In only five cases was it necessary to remove the dressings on account of local or general disturbance, and, as a rule, they were left in place for a fortnight. The advantages claimed for the mould are, that its absorbent power is so great that wounds remain perfectly dry under its use; that it absorbs the products of decomposition, and probably checks their formation; that the pads are very soft and elastic, easily adapting themselves to the surfaces of the limbs and trunk; and that turf mould affords the cheapest known antiseptic, since it costs only about one-ninth as much as the carbolic gauze (Listerian) dressings.

The Inheritance and Hygiene of Bright's Disease.

In the *Practitioner*, Dr. Joseph Kidd relates a remarkable instance of the hereditary nature of Bright's disease. A lady, aged sixty, one of a family of most temperate habits, died in 1860, of Bright's disease. One of her children died from the same disease in 1872, aged thirty four. Another died in 1873, aged thirty; still another in 1880, aged forty-six. In one case the disease was known to have existed for ten years, and in another there were all the symptoms and signs of advanced granular degeneration of the kidneys for seventeen years before death. Another child has had the disease for twelve years, and of her children (grand-children of case No. 1), two out of five have Bright's disease, one for the past ten years, and the other for the past nine years. In all of these cases great attention has been paid to hygiene, and its influence on the course of the disease has been most marked. Several times grave uræmic symptoms would supervene, but under appropriate treatment would pass off. Case two, who died aged forty-six, and who had had the disease for seventeen years, afforded the most striking proofs of the value of hygiene in this disease. During nearly all this time the urine was highly albuminous and contained granular casts; he led an active business life, but endeavored to take care of his health, leaving work every now and then, for long holidays; wore Shetland wool underclothing, and kept up out-door exercise. He was more careful than his brothers, and lived longer with the disease than they did. He often wintered in the South of Europe. In an evil hour he was persuaded to take a voyage to Alexandria in March, contracted dysentery there, and nearly died. Subsequently returning from Cannes, he crossed the Alps on the *outside seat* of a carriage, caught cold, dropsy of the chest came on, and he died en route. The whole experience of this family goes to prove that hygiene has infinitely more influence in prolonging life with, than has any known drug in curing, Bright's disease of the kidney.

"Catching Cold" from Wettings with Salt Water.

Dr. William H. Pearse writes to the *Medical Press and Circular* that he has been some thirty times around the world, in the latitude south of Capes Good Hope and Horn, in charge of thousands of people, and that he does not remember ever seeing illness caused by drenchings in sea water. He says: "Personally, I became indifferent to being drenched by the great seas breaking over the ship; sometimes I would change clothing, but as a general rule, I would not take that trouble, but remain wet and rewetted. The top of a mighty wave would come on board and drench a crowd of people. I never myself took cold, and this same immunity extended almost as fully to the people.

As illustrating the seemingly slight circumstances on which health and disease depend, I may mention that, having always worn American cotton twill trousers, and being in Madras when the heat was great, I ordered a stock of brown holland trousers, as being cooler. I tried them over and over again, but always suffered in consequence—chills, or diarrhœa, or aching in the limbs. So marked and curious did this seem, that I used to speculate whether or not the linen texture had some special conducting power of the hypothetical vital conservative "energy" of the body! Be that as it may, of the facts of the danger of linen and the safety of cotton I was forced to believe, as I was also of the absolute safety of a wetting from sea water, and of the great danger of a wetting from a mere shower in Bengal or Guiana.

The Abortive Treatment of Gonorrhœa.

Believing that gonorrhœa is due to parasites, Dr. W. Watson Cheyne (in the *Lancet*) contends that the proper method to abort the disease is to destroy the parasites. The materials which he employed with the view of destroying the cause of gonorrhœa were chiefly iodoform and eucalyptus oil, and these he still uses. As injections are apt not to penetrate sufficiently far, and as their effect is only momentary, he combines these substances with cocoa butter, and makes them up in the form of solid rods about 4 in. or 5 in. in length, and about the thickness of a No. 10 catheter. These rods weigh forty grains each, and each contains five grains of iodoform and ten minims of eucalyptus oil. They are dipped into eucalyptus oil, introduced into the urethra, over the orifice of which a pad of boracic lint is applied, and outside this is a large piece of gutta percha tissue, the whole being fastened on by strapping, and retained for four or five hours, if possible. The cocoa butter soon melts, and a solution of iodoform in eucalyptus oil bathes the mucous membrane for some hours. Another rod may then be inserted, and a suitable injection be employed afterwards. This method is only of use, in his experience, before or during the inflammatory stage, and he employs it at any time till the inflammatory symptoms have disappeared, but generally within the first seven or eight days after the commencement of the discharge.

Incision of the Trigone.

The Edinburgh *Medical Journal* says that Sonnenburg, in *Centralblatt für Chirurgie*, states that this operation has been twice successfully performed in children. It is necessary that the calculus can be felt through the rectum, and that during anæsthesia it can thus be felt and drawn backward. The patient, being slightly narcotized, stands in front of an attendant, resting his head and shoulders in the latter's lap. The operator then introduces his forefinger into the rectum, pushes the peritoneal fold upward (apparently easily felt?), finds and grasps the stone, and draws the latter backward towards the gut. A vertical incision upon the stone is now made as far as the edge of the prostate, and the calculus is pressed through the wound. On the bladder resuming its normal position the incision is found to be very small. The attendant hemorrhage is slight, and the fistulæ healed in from 17 to 35 days. This method has the advantage of leaving the sphincters, the prostate, and the urethra intact, and seems to resemble the old method of Celsus. It has not yet been tried in the case of adults, and experience only can decide whether the fistulæ always heal as well as in the cases cited.

Prognosis in Diabetes.

The *Practitioner*, quoting from *Wiener Med. Woch.*, says that Dr. R. Schmitz, of Neuenahr, as a result of six hundred observations, says the question of prognosis is determined by (1) the earliness of the discovery and treatment of the complaint; (2) the strictness with which the antidiabetic regimen is observed; (3) the etiological factors; (4) the age of the patient; (5) the degree of immunity the patient enjoys when he chances to use sugar-breeding food. In early cases the prognosis is favorable. Diabetes depending on central nervous lesions or on grave chronic affections is serious; depending on worry, pain and grief, or on over-use of sugary

food, it is less so. Gouty diabetes has the best prognosis of all. After the age of thirty the prognosis grows steadily worse. It is bad if sugar persists on an exclusive diet of fish and flesh. It is decidedly favorable if eggs, salads and mild cheese can be taken without breeding sugar, which only reappears when fruits, starchy roots, starch or cane sugar are taken.

Special Reports.

NO. X.—THERAPEUTIC PROGRESS.

(*Continued from page* 391).

CARBOLIC ACID FOR NÆVI.

In the *British Medical Journal*, Dr. Yeats reports a case of large venous nævus on the bridge of the nose in a child, which was cured by injecting, at one sitting, into different parts of the tumor, through one external puncture, five drops of carbolic acid and olive oil, equal parts. Care was taken to make firm pressure round the base of the nævus while the fluid was injected. The cicatrix that formed was very insignificant.

ANTI-ASTHMATIC MIXTURE.

The *Jour. de Med. et de Chirurg. Prat.* says that M. Huchard, of the Hôpital Tenon, employs the following, especially when the symptoms of bronchial catarrh are added to the attacks of asthma:—

℞.	Distilled water,	300 parts
	Iodide of potassium	
	Tincture of lobelia,	
	Tinct. polygala, of each,	10 parts
	Extract thebaic,	1-10 parts. M.

A tablespoonful to be taken night and morning.

ACONITE IN DYSENTERY.

In the *Indian Medical Gazette*, Dr. Owen reports the result of one hundred and fifty-one cases of acute dysentery treated with aconite. He was induced to look about for another treatment than the conventional one, with ipecac, on account of the nausea which often attends the latter, and which often drives hospital patients, especially, to rebel against a repetition of the dose. Dr. Owen gave the tincture of the British Pharmacopœia, which is of one-sixth the strength of Fleming's tincture. He gave one minim every fifteen minutes, for the first two hours; after that, one minim every hour. This would make thirty minims in twenty-four hours. Dr. Owen feels that his experience in one hundred and fifty-one cases justifies him in speaking quite positively in favor of the treatment. In his paper he gives a very good analysis of his results.

ELECTRICAL TREATMENT OF ANGINA PECTORIS.

The *Practitioner*, quoting from *Aerztl. Intelligenzbl.*, No. 39, 1881, says that Dr. Löwenfeld relates a case of angina pectoris, in which galvanization proved beneficial. The patient, a man aged forty-seven, was subject to attacks of the disease occurring every month or two. These were characterized by excited respiration, oppression, small, frequent pulse, sternal pain radiating to the left arm, and convulsive tremors of the limbs, and lasted about one hour. The heart was normal. The constant current was applied for one minute to each side of the neck, along the course of the pneumogastric. The sense of oppression was immediately relieved. Ten such applications in the course of three weeks were followed by complete freedom from the attacks for more than two years.

OIL OF PEPPERMINT IN ZONA.

Dr. Meredith writes to the Birmingham *Medical Review*, that he has found the oleum menthæ pip. more effective than any other form of anodyne application he has ever tried, in allaying the neuralgic pains so often piteous y complained of in cases of herpes zoster. These distressing pains, worse in elderly people, are complained of often when the eruption has disappeared; but painting the affected parts over with oleum menthæ pip. nearly always affords speedy relief. He has painted the oil over the eruption when it was out in a fresh, florid condition, and that with great relief to the patient. The value of this application in pains of neuralgic character deserves to to be better known than it is.

ERGOTINE IN TYPHOID.

The Boston *Medical and Surgical Journal* says that the treatment of typhoid fever by the subcutaneous injection of ergotine, as recommended by Dr. Dubonć, continues to be noticed in *Le Journal de Médecine et Chirurgie*. The last case described is of a young woman, three to four months pregnant, in whom the treatment was begun on the eleventh day of the disease, when there was much tympanitis, diarrnœa, bronchitis, and dyspnœa, and when continuous delirium had given place to semi-coma. The morning temperature was 104° F. Ten centigrams of ergotine were injected daily for six days. The first injection was followed by a copious general papular eruption, of the size of a millet seed. The temperature fell to 101.5° F., and did not again rise above 103° F. The other symptoms underwent corresponding amelioration, and the temperature became normal on the seventeenth day of the disease.

Four days after the discontinuance of the ergotine the patient aborted, without any unfavorable symptoms. The fact that the abortion in this case took place so long after the omission of the ergotine, and the history of another case in which one and a half to two grams of ergot were administered daily for two weeks to a pregnant woman, without causing miscarriage, seem to confirm the harmlessness of this drug to persons who are pregnant.

CHLOROFORM AND NITRITE OF AMYL.

The Cincinnati *Medical News* says that in a recent communication to the *Medical Record* attention is directed to the use of nitrite of amyl in chloroform narcosis. It is stated in *Holmes' System of Surgery* that "nitrite of amyl has received the highest commendation as a means of combating chloroform narcosis. Its administration being by inhalation of the vapor, it can only be resorted to in some cases. Recoveries have unquestionably followed its use, but whether as a sequence or consequence is not so clear, and further observations are needed. It must be remembered that, although nitrite of amyl is a most effective remedy in one form of cardiac disease, its brilliant service is not due to its action on the heart, but upon the peripheral arterioles, spasm of which it relaxes, and that its action in lowering the blood-pressure is not favorable to its use in chloroform accidents." Experiments show, however, that hypodermic injections of five drops of nitrite of amyl, after complete anæsthesia and abolition of reflex action, with suspended respiration and a fluttering heart, are promptly followed by reaction of the pupils of light, resumption of respiration, and improved cardiac action, with ultimate recovery; so that the administration of this agent need not be limited to the inhalation of this vapor, but it may be given hypodermically. Again, although "its brilliant service is not due to its action on the heart," the result is similar, since, by the *vis a fronte* effect produced when the arterioles are relaxed, the cardiac current is drawn into the enlarged vessels, and stasis is prevented. Further, the statement that "its action in lowering the blood-pressure is not favorable to its use in chloroform accidents" does not seem to be borne out by the clinical experience. Dr. James L. Minor, of Rapidan, Va., reports a case in which a patient who had locomotor ataxia passed suddenly from a condition of usual health into collapse. There was a general pallor, with complete unconsciousness, and the arterial beat was imperceptible at the radial pulse, but faintly recognized at the femoral pulse. Here was evidently a lowering of the blood-pressure similar to that which occurs in chloroform syncope. The ordinary method of inhaling a few drops of nitrite of amyl was tried in vain, and then three minims were injected hypodermically. In a few moments the heart responded, and the pulse was recognized in the radial artery. In about half an hour the effects of the medicine seemed to disappear, when five minims were injected, with the result of producing action more vigorous than before. The patient lasted for nearly twenty-four hours, during which time amyl nitrite was frequently administered. As much as fifteen minims were given at one of the doses, when the "pulse became incompressible." So long as the vital powers were able to respond, the administration of the medicine was followed by a reaction which seemed marvelous.

Cases are also recorded in which impending death is said to have been conclusively averted by nitrite of amyl.

TREATMENT OF EXCESSIVE SWEATING.

In the Michigan *Medical News*, Dr. Currie says that for over thirty years he has used the following prescription, without a single failure, in sweats from whatever cause: Alcohol, Oj, sulphate of quinine, ℥j. Wet a small sponge with it and bathe the body and limbs, a small surface at a time, care being taken not to expose the body to a draught of air in doing it. In one case, a neighboring physician was poisoned while dressing a mortified finger. He suffered untold misery, and was drenched with perspiration for a number of days, and his life despaired of. When he saw him he ordered him to be bathed immediately in the above solution, and that this be repeated once in two hours. The third application stopped all perspiration, and convalescence began at once.

POMADE FOR COMEDONES.

The St. Louis *Medical Journal* says that Unna, in *Virchow's Archives*, recommended the following for comedones: Kaolin, 4 parts; glycerine, 3 parts; acetic acid, 2 parts, with or without the addition of a small quantity of some ethereal oil. With this pomade he covers the parts affected, in the evening, and if need be during the day. After several days all the comedones can be easily expressed, most of them coming out by washing the parts with pumice-stone soap. He reports uniform success from the use of this method. The *rationale* is based upon the view that the comedones are not produced by an accu-

mulation of particles of dust or dirt, but by pigmentary matter which is soluble in acids. It is a well known fact that comedones which accompany acne appear not only upon persons exposed to dust or careless of their persons, but also on chlorotic young girls in good circumstances. Besides, the discoloration not only exists on the surface of old comedones, but always descends to the lower parts. The same results as those obtained by the use of the above mixture can be secured by bandaging the affected parts for a long time with vinegar, lemon juice, or dilute hydrochloric acid. The author concludes by saying that the acids act like cosmetics, transforming the black color into a brown or yellow shade, and destroying it gradually altogether. They also produce a quicker desquamation of the horny bed which interrupts the exit of the comedones, and bring to the surface the glandular openings.

FUCHSINE IN BRIGHT'S DISEASE.

The *Canada Medical and Surgical Journal* says that this remedy has been used extensively by Dr. Renzi, of Geneva, given in pill form, .025 gram ($\frac{5}{2}$ grain) twice a day. There was at once a noted diminution of the albumen and dropsy. The urine was colored for some days. No result followed in one case. Similar experience was had by Brochut, of Paris. In every case albumen disappeared rapidly and entirely, the treatment generally lasting from four to six months. Dr. James Sawyer has used it mostly in cases of contracted kidney, with good results and no untoward physiological effect. It colors the mucous membranes of the digestive organs a deep red, and also the plasma of the blood, due to its presence, not to blood change.

SULPHUR IN WHOOPING COUGH.

According to the *Medical Press and Circular*, Dr. Luton recommends, in the treatment of whooping-cough, especially in the convulsive period, the administration of sulphur. Flowers of sulphur, 8 to 15 grains, sugar of milk, 16 grains. In ten powders, one every two hours, carbonate of iron should be given to keep up the strength, ten grains in the day. Coffee renders good service, and a vomitive should be given every two days. Belladonna, which has been considered the most efficacious remedy in this disease, has been given by Trousseau as follows: Ext. belladonna four grains, syrup of poppies and simple syrup, of each one ounce; one to eight teaspoonsful to be given in the twenty-four hours, according to age. Dover's powder associated with extract of hemlock has been frequently given with the best results in the formula: Dover's powder one grain, extract of hemlock in powder one grain, ginger in powder two grains, and sugar four grains, the whole to be given at bedtime, for a child of two years.

SPIRÆA ULMARIA IN PROSTATIC ENLARGEMENT.

Dr. J. Baugh writes as follows to the *Canada Lancet*:—

The use of this drug in the treatment of senile enlargement of the prostate gland has, in three cases, given me wonderful results. About ten months ago I was called to see T. B., æt. 68, in the city of London, and found him suffering from retention of urine. I had him put immediately into a hot hip-bath, the hot water coming well over the pubes, and administered a drachm of paregoric and twenty drops of Hoffman's anodyne every thirty minntes. He remained in the bath about fifteen minutes, when hot wet cloths were applied over the bladder. Nearly two hours elapsed before this method of treatment had the desired effect. After the bladder had been evacuated, I found on examination per anum, hypertrophy of the prostate. I then explored the urethra with a No. 10 catheter, found no obstruction, and the instrument glided into the bladder without difficulty. Two weeks subsequently to this attack, I was called again to the same patient. I tried my former method of treatment, but it failed. I also failed to introduce the catheter. Matters were becoming alarming, and I was about to send for professional assistance, when it came from another source, viz., an old woman. She volunteered the information that the patient wanted a dose of Queen of the Meadow (the common name for Spiræa Ulmaria) and that if he got it, it would cure him in quick time. She said some could be procured in a few minutes. I asked her to get it. It was brought, an infusion was made and half-a-pint given to the patient, and in fifteen minutes he desired to micturate, and emptied his bladder without difficulty. Since that time the patient has needed no medical or surgical aid to rid him of his old enemy. If he gets on a spree and his old trouble threatens him, he takes Queen of the Meadow tea and rejoices in being saved. In two other cases of this nature in which I used this drug, the results were just as satisfactory. I have tried it on myself in health, and find that it acts as a diuretic and astringent, since it sometimes causes smarting pain as the urine passes along the urethra. Its anti-spasmodic properties are very marked at the sphincter vesicæ, and I think much of its virtue in the affection named results from its power to overcome the contraction of the neck of the bladder arising from irritation in the prostatic region. It is my opinion that, in many cases of retention of urine from prostatic enlargement, the enlargement is not, *per se*, the main obstacle, but rather the spasmodic contraction of the sphincter vesicæ, as the result of a sudden congestion or inflammation of the prostate gland.

QUINIA SULPHATE IN PRURITUS.

Dr. Steele, of Denver (*Lancet and Clinic*), has found quinia sulphate, rubbed up with onl sufficient lard to hold it together, a specific for pruritus. He uses it in both pruritus ani and vulvæ. The nearer you get to the full strength of the quinine, the more efficacious it will prove.

PEROXIDE OF HYDROGEN IN SURGERY.

From the *Lancet* we note that the powerful germicidal properties of peroxide of hydrogen, the *eau oxygenée* of the French, have led MM. Péan and Baldy to test its practical value as a surgical dressing for extensive wounds and ulcerations of various nature, as an injection into sinuses and cavities, such as the bladder, the nasal cavities, and also in the form of spray, as a substitute for carbolic acid spray in major operations, such as ovariotomy. It was applied by means of compresses covered with an impermeable material, to prevent evaporation. During the dressings a spray of it was employed. The preparation used was absolutely neutral in reaction, and contained four or six times its volume of oxygen; but for the injection of sinuses or closed cavities a weaker solution was employed, containing only one or two times its volume of oxygen. The results obtained from more than a hundred cases have been most satisfactory, in grave as well as in trifling cases. Under the treatment recent wounds made with the bistoury or thermo-cautery, old wounds, even, when covered with gangrenous tissue, complicated with lymphangitis, or erysipelas, rapidly assumed a healthy aspect, granulating freely, with perfectly sweet, creamy pus. Chronic ulcerations rapidly cicatrized, and amputation wounds presented a strong tendency to heal by first intention. The general condition of the patients presented at the same time a marked improvement. The results are stated to have been quite as satisfactory as those obtained with carbolic acid. It has the additional advantage of being free from any toxic property, from any unpleasant odor, and of causing no pain. The results were especially satisfactory in some cases of varicose ulceration of the legs, intra-articular abscesses, ozæna, and purulent cystitis. In some remarks on the occasion of M. Péan's communication to the Académie des Sciences, M. Paul Bert, to whose investigations the French are indebted for most of their knowledge of the subject, pointed out that in the surgical use of this substance its influence was exerted in two ways, first by killing the organisms, and secondly by continually liberating oxygen on the surface of the wound. He insisted on the care which must be taken to secure its purity, since most commercial specimens contain a considerable quantity of sulphuric acid.

THE ACTION OF QUININE AND SALICYLIC ACIDS ON THE EAR.

The same journal says that in order to ascertain whether the noises in the ears produced by salicylic acid and by quinine are due to a congestion of the labyrinth, Dr. Kirchner has instituted some experiments in the pharmacological laboratory at Würzburg. The noise in the ears is sometimes accompanied by giddiness and deafness, which, usually ceasing when the medicine is discontinued, sometimes persists as a serious malady. Kirchner employed in his experiments rabbits, cats, dogs, and guinea pigs. His conclusions are that both these agents cause hyperæmia of the tympanum, which may go on to hemorrhage, and that the whole of the labyrinth participates in the congestion. It may become so intense that, if it lasts long, it will cause of necessity an alteration in the nerve filaments, and it may lead to exudation. This congestion he regards as produced by a vaso-motor mechanism. In this conclusion, however, another series of observations made by Weber-Liel and Guder does not agree. They observed carefully the symptoms produced in certain healthy individuals by a moderate dose (fifteen grains) of quinine, and noted, during two hours and a half, a gradual fall in the temperature of the external auditory meatus, corresponding to the diminution in the general temperature of the body. No hyperæmia could be detected in the meatus, the membrana tympani, or the handle of the malleus, either during this period or later. On the contrary, in five cases a slight hyperæmia which existed previously was found to disappear. The subjective noises in the ears come on at the end of an hour or an hour and an half, and continue for ten or twelve hours, while the deafness comes on one or two hours later than the tinnitus, and is greatest at the time that the general temperature of the body is lowest. Similar experiments were made with salicylic acid. Four or five grams of salicylic acid caused a diminution in the temperature of the external auditory meatus, which falls in the course of two or three hours to 95°. No indication of congestion could be discovered, and, as in the case of quinine, previous hyperæmia became lessened. Noises in the ear came on later and lasted longer than in the case of quinine. The deafness is very marked, and continued in some instances for several days, and in some cases in which there existed previous ear dis-

eases, the loss of hearing was more prolonged, enduring in one case for nine months. In more than half the cases giddiness comes on a little after the subjective symptoms. Comparing the effects of salicylic acid and quinine, it appears that the former causes a less considerable depression of temperature and a more prolonged diminution in hearing. It is difficult, therefore, to ascribe the aural effects either to congestion or to anæmia, and if these observations are reliable, it would seem to be due to a primary nervous influence.

THE RATIONAL TREATMENT OF TAPEWORM.

Dr. Forbes Dick thus writes to the *British Medical Journal*: Allow me to express my belief that the male shield fern, properly administered, will expel not only the segments but also the head of the tapeworm. With due respect to high authority, I would submit that the adult dose of the Pharmacopœial liquid extract, as an efficient vermicide in cases of tænia, is not, as laid down in the *British Pharmacopœia*, from fifteen to thirty minims; nor, as usually administered to soldiers, one drachm; nor even, as Squire and others allow, eighty or ninety minims, but two drachms. The mode of administration should be as follows: A full mid day meal may be eaten, and a little bread, with tea, at 5 P. M. At 10 or 11 P. M. a binder is to be applied to steady the stomach; and on lying down in bed the following is to be taken. (Neither prolonged fasting nor filling the big bowel with fluid seem to be necessary.)

℞.	Extracti filicis liq.,		ʒ ij
	Spiritus chloroformi,		♏xxv
	Pulveris acaciæ,		gr. xx
	Aquæ,	ad	℥ ij. M.

In the morning half an ounce of turpentine beaten up with the yolk of an egg should follow. The above large dose of the male shield fern is occasionally vomited, but I have failed to discover any deleterious effect contra-indicating its use. When vomiting happens, which is rare, on the following evening the same quantity should be taken in two doses, at half an hour's interval. The half an ounce of turpentine is more liable, especially in the tropics, to produce irritant symptoms. If active exercise be taken under a tropical sun after this dose, strangury follows, which there indicates the propriety of rest, to limit perspiration and prevent concentration of urine, and the drinking of bland fluids. A vermicidal effect being desired, surely one large dose of a remedy is more certain than several small ones.

Correspondence.

Information Wanted in Spirometry.

Ed. Med. and Surg. Reporter:—

I have been making observations and experiments with various spirometers, for the past three years, and hope to be able to write an article on the use of the instrument.

I wish to embody in the article the views and experiences of as many physicians who have used the instrument as possible, and hence, ask replies to the following questions:—

1st. Have you used a spirometer regularly, and how long a time, or about how many observations have you made with it?

2d. What form or kinds of spirometers have you used, and which do you regard as the best?

3d. What are the sources of error in the instrument, in your opinion?

4th. Have you ever made any systematic experiments as to whether the normal vital capacity can be increased beyond a certain limit, by the forcible and repeated use of the respiratory apparatus?

5th. What, in your opinion, is the value of the spirometer as a means of diagnosis and prognosis, and is this opinion the result of investigations you have made, or do you merely reëcho what you may have found in books on the subject?

6th. Please mention any articles on spirometry you may know of, other than those by Hutchinson, Hammond, or Guttmann.

Answers to any one or all of these queries will be duly acknowledged. A. H. Hoy, M.D.

914 *State st., Racine, Wisconsin.*

[Our subscribers will aid in the scientific appreciation of this curative method by attention to the above.—Ed. Reporter.]

Butternut as a Preventive Remedy in Abortion—from Abroad—not New.

Ed. Med. and Surg. Reporter:—

History repeats itself in medicine; "honor to whom honor is due;" current vol. Medical and Surg. Reporter, Dr. Bell Morrelton, in *France Medicale*, has the following:—

℞.	Ext. hyoscyam.,		ʒ j
	Ext. juglandis cinereæ,		ʒ j
	Oil sassafras,		ʒ ss
	Sodii bicarb.,		ʒ ss
	Syr. simp.,		ʒ vj. M.

Rezin Thompson, M.D., of Nashville, Tenn., read before the Davidson County Medical Society, October 5th, 1853, a paper on the use of ext. hyoscyam. and oil sassafras in some of the misfortunes attendant on pregnancy, from which I make the following extracts:—

"Having ascertained the controlling power which the remedy was capable of exerting over many forms of disease arising from morbid innervation, and looking upon most cases of abortion and premature labor as originating from that cause, I expected it to prove valuable in their treatment, and was not disappointed when I brought it to the test of experience. I have now used it in all cases of this kind in a large practice for twenty-five years, having more call

than usual in the same amount of general practice, my success having given me some notoriety in that line. I recollect of no case of failure where I was called in previous to occurrence of considerable expulsive uterine contraction." He gives the history of a number of cases.

He further says: to sum up the purposes for which I give the remedy. I give it in all cases of threatened abortion, when not caused by accident or severe sickness. I use it for all the nameless pains, aches, and disquietudes, attendant on conception and gestation. I give it to prevent and remove, when present, premature and erratic pains in the latter stage of pregnancy. In fact, in all cases in which I am previously spoken to, I put the patient upon its use a week or more before the expected confinement, for the purpose of removing any excessive nervous excitement of the general system, especially of the os uteri; thus preparing it to yield kindly to uterine contraction; and after delivery, I give it to soothe the excited system, and prevent those spasmodic contractions called after pains.

The following is Dr. Thompson's formula and name, viz:—

COMPOUNDED SYRUP, BUTTERNUT OR ANODYNE ALTERANT.

℞.	Ext. hyoscyam.,	℥ j
	Ext. juglan.,	ʒ vij
	Oil sassafras,	ʒ ss
	Bicarb. sodii,	ʒ ij
	Syrup. simp.,	½ gal. M.

SIG.—Dose, one tablespoonful, as required to keep bowels soluble.

There is a striking similarity in the two formulæ, enough almost to lead us to think that our French brother had seen Dr. T's formula. Dr. Thompson, long since deceased, was a physician of keen observation and an original thinker. He published a work on fevers in 1856, which also contains articles on several other diseases, giving his peculiar views.

Gallatin, Tenn. T. M. WOODSON, M.D.

Carbolic Acid in Blood Poisoning.

ED. MED. AND SURG. REPORTER:—

In the interest of historical accuracy, I beg leave to call your attention to an inaccuracy of a paragraph that I have seen credited to your valuable journal.

After referring to the use of hypodermic injections of carbolic acid in blood poisoning, it is stated: "Nor was Dr. Déclat its originator; four years ago Dr. N. B. Kennedy, of Texas, used and wrote upon the advantages of these injections, and in April, 1881, he read a paper before the Texas Medical Association, in which he claimed priority of all others in its employment."

In a work now before me, entitled "De la Curation du Charbon, etc.," by Dr. Déclat, published in Paris in 1872, there are full directions given for the hypodermic injection of a solution of phrenic acid, with most interesting histories of cases of malignant pustule and other diseases cured by their means prior to that time, and especially during the siege of Paris.

These results had been communicated to the Academy of Science in the meeting of October 2, 1871, and are published in the *Comptes Rendus de l' Academie des Sciences*, 1871, 2me. *semestre*. No. 14. J. F. CORRIGAN, M.D.

New York, Sept. 18, 1882.

Stone in the Bladder.

ED. MED. AND SURG. REPORTER:—

I notice in the August number of the REPORTER a new way to detect stone in the bladder, by Dr. James McKenzie Davidson, as quoted from the *Lancet*. The auditory method may be a new one to him, but it is not to me. I received my knowledge of this method in the winter of 1878, while attending the surgical clinics of Prof. E. Andrews, in the Mercy Hospital of Chicago, who advised this method of examination in all obscure cases. C. T. MELSHEIMER, M.D.

Bluffton, Ind.

NEWS AND MISCELLANY.

The Chair of Operative Surgery in Berlin.

After Prof. Volkmann had also declined the chair of surgery in Berlin, for so many years occupied by Prof. Langenbeck, Prof. Bergmann in Wurzburg, has been elected, August 1st, A.C., as Professor of Surgery and Director of the Surgical Clinic of the University of Berlin. Bergmann is said to intend to begin his lectures the coming winter.

July 29th, v. Langenbeck said good bye forever to students and colleagues, in the amphitheatre of the surgical clinic. The room was beautifully decorated with flowers and with the finely executed bust of the beloved teacher. This bust will find its permanent place in the amphitheatre. The large room was too small, almost, for the many students, professors, physicians and friends of the celebrated surgeon; the earnest and sad words of Bardelsben and v. Langenbeck were a proof how severe this final separation was felt by the parting professor. as well as by those remaining. The *Deutsche Medizinal Zeit*, Aug. 3, 1882, adds to these remarks; "May the genius of Langenbeck continue to live in these halls, may the work he commenced and his ideas be further carried on in them, for the well being of suffering humanity, and to the glory and honor of medical art and medical science."

A New Grecian Pharmacopœia.

The *Pharmaceutical Journal* learns from a correspondent, that a Commission has just been entrusted by the Government with the task of elaborating a new Greek Pharmacopœia. The first official Greek Pharmacopœia made its appearance in the year 1837. In 1868 this work was reprinted, with an appendix, by Professor Landerer, describing the more recent remedies, and containing an etymological dictionary of names of botanical, zoölogical, and mineral substances, and a list of antidotes. This work is still in common use throughout Greece, as well as in Asia Minor, and also to some extent in Constantinople; but in Turkey, Dorvault's *l' Officine* is the work usually consulted.

A Good Opening.

The *Medical Times and Gazette* says that a correspondent writing from Puget Sound to the editor of the *Times*, of which place he gives a glowing description, says that professional services are rewarded richly. "I know of one young doctor who had the good luck to cure a grievous case of diphtheria soon after his arrival. He won a reputation instantly, and cleared $100,000 in eight years' practice."

The Latest Ligature.

The very latest in the wide field of antisepsis are (after the Kangaroo sinews, mentioned in one of our late numbers), carbolized nerves as ligatures. It is said of them, that they excell by their greater smoothness and durability, and that they are in every respect superior to catgut. The sciatic nerve of a calf was used as material. So far, experiments with these new ligatures were made on animals only, not as yet on men.

American Gynecological Association.

The American Gynecological Association held its annual meeting in Boston, Sept. 20, 21, and 22. The next session will commence in Philadelphia, on the third Tuesday in September, 1883.

Items.

—A very interesting and instructive medical congress was held in Seville, last spring.

—One year ago a needle entered the wrist of a young lady in Elmira, and the other day it was removed from the arm of the fellow who is her steady companion.

—Dr. H. L. Getz, of the class of 1874, Jefferson Medical College, has been elected to the chair of Physiology in the College of Physicians and Surgeons, Chicago.

—An imitation glycerine has been put on the French market. It is found to be simply a saturated solution of magnesia sulphate, with sufficient glucose to somewhat disguise the otherwise bitter taste.

—A painter who turned physician was asked why he had quitted his profession. "Because," he replied, "my former business exhibited my mistakes in too glaring a manner; therefore I have now chosen one in which they will be buried."

—The first acknowledged Sanitary Act in the statute-book of Great Britain was, in point of fact, a River Pollution Bill; for in the year 1388 an act was passed, imposing the very high penalty (considering the then value of money) of $100 upon persons casting animal filth and refuse into rivers.

—The Parisians deal energetically with milk adulterators. A posse of police lately waited the arrival of the morning's milk at Batignolles station, in Paris, and after witnessing from behind a loopholed wall the interesting process of "watering," pounced upon the delinquents, whom, with their deteriorated wares and a quantity of bicarbonate of lime, they carried off in triumph.

OBITUARY NOTICES.

MEDICAL INSPECTOR B. F. GIBBS.

Medical Inspector Benjamin F. Gibbs, of the United States Navy, died September 9th, at Trieste. He was born in New Jersey, entered the navy in 1858, as assistant surgeon, was attached to the steamer Memphis, of the Brazil squadron, and took part in the Paraguay expedition. In the following year he was detailed to the sloop John Adams, of the East India squadron, remaining on that vessel until 1862. In September of that year he joined the West Gulf blockading squadron, and was given charge of the hospital at the Pensacola navy yard. Thence he was attached to the steamsloop Ossipee, of the West Gulf blockading squadron, and Aug. 5, 1864, took part in the battle of Mobile bay. The following year he was on the vessel which chased the rebel ram Webb down the Mississippi. During a part of 1865 and 1866 he was attached to the schoôl ship Sabine, going thence to the Ossipee, of the north Pacific fleet. In 1869 he was detailed to special duty in connection with iron-clads in ordinary at New Orleans. In 1874 he was at the Norfolk navy yard, and during the same year he was appointed fleet surgeon, south Pacific station. Three years later surgeon Gibbs received his commission as medical inspector, the rank he held when he died. His death promotes surgeon Edward S. Bogert and passed assistant surgeon John C. Wise.

DR. HIRAM NOTT.

Dr. Nott, who was at one time a very well known druggist, in New York city, died recently, of Bright's disease. He was 71 years old, and for a quarter of a century was proprietor of the drug store at the corner of Water and Fulton streets, whose business was established as long ago as 1800. He made much money, and 10 years ago retired to enjoy the pleasures of private life. He was exceedingly fond of a good horse, and his teams were well known on the road.

QUERIES AND REPLIES.

Subscriber, Austin, Nev. If any chloric acids are given while using calomel, corrosive sublimate may be formed in the stomach—

A. T. There can be no reaction between calomel and sugar of milk, unless the latter contains impurities.

MARRIAGES.

BROWN—SNYDER.—On September 28th, at the residence of the bride's sister, 419 North Thirty-third street, by Rev. Andrew Longacre, D.D., Dr. C. H. Brown, of Lancaster, Pa., and Miss Flora W. Snyder, of Philadelphia.

CURTIS—BOGERT.—In New York, Thursday, September 28th, at Zion Church, by the Rev. Arthur Brooks, Dr. B. Farquhar Curtis, and Eva Hawks, daughter of Edward C. Bogert.

GREEN—SPOONER.—At the residence of the bride's mother, Hempstead, L. I., Thursday, September 28th, by the Rev. Dr. S. Irenæus Prime, Charles L. Green, M.D., of Providence, R. I., and Maria S., daughter of the late Alden J Spooner.

STARR—PARRISH.—On the 16th instant, at St. George's, Widmore, Kent, England, by Rev. Dr. A. R. Welden, Louis Starr, M.D., and Mary, daughter of the late Wm. D. Parrish, of Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

CASE OF TYPHOID FEVER.

BY E. T. BLACKWELL, M.D.,
Of Philadelphia.

The following case is reported because of the symmetry and fullness of all the usual symptoms; of some interesting phenomena connected with the brain and the digestive organs, and the remedial influence of the drugs used, some very freely, and others with exceeding reserve.

B. H. was affected with the usual prodromata of fever during March 24th, 25th, and 26th, and had decided paroxysms on the 27th and 28th. At noon on the latter day he was perspiring; his tongue was heavily coated white; the bowels sluggish; the pulse beat 90 per minute. He was under the influence of quinine, which was continued. He was to take, alternately with it, a diaphoretic mixture and one grain calomel till the bowels were opened.

At 8 A.M. of 29th the pulse marked 84; and at 5 P.M. 90. The patient complained of heaviness of the head, and slight tenderness and tympany of the bowels.

30th, 8 A.M. Skin somewhat congested; bowels tender and tympanitic; legs drawn up; bowels still closed; tongue white, with papillæ shining through; pulse 90; has had epistaxis. At 5 P.M. the pulse marked 92, and the temperature, then first taken, was 105°. There was more epistaxis during the afternoon. At 9 P.M. the pulse was unchanged; temperature reduced to 104°; indisposed to urinate. 31st. 9 A.M., pulse 96, temperature 102.6°; tongue moist and cleaner at the tip; report of high fever toward morning; increase of tenderness and tympany of the bowels; four liquid stools during the night. Noon, temperature 104°; 6 P.M., 103.4°; patient complains of stiffness of tongue and soreness at its tip.

April 1, 9 A.M. There have been eight liquid movements during the night; temperature, 1 A.M. 102.6°; the head is dizzy and aches slightly; pulse 93; skin dry; partially insensible to calls of bladder and bowels, and there is slight subsultus tendinum. Ordered Hope's Mixture, c. m. h. t. 2 P.M., there is intolerance of light and sound; one evacuation since morning. 4 P.M., temperature 103.6°; 7 P.M., 105.2°, and pulse 96. April 2, 2 A.M., temperature 104.1°; 8 A.M., 103.6°, and pulse 92; four movements in last 24 hours; there are no rose-colored spots; talks considerably, both waking and sleeping. 1 P.M., three movements since last report; tongue clean at tip, and moist, showing enlarged papillæ; head comfortable while in repose; pulse is weak; no apparent fever. 6 P.M., temperature 104.4°. 3d, 8 A.M., very thirsty, and restless during the night; talks incoherently; pulse 82; to take iodide of mercury, in accordance with suggestion of Liebermeister, in *Ziemssen's Cyclopædia*—hydrarg. protiodide, $\frac{1}{12}$ grain, with small amount of opium three times daily. 6 P.M., temperature 103.6°. 4th, 8 A.M., restless and incoherent during the night; several involuntary evacuations; at 5 A.M. he took $\frac{1}{4}$ grain morphia, and was afterwards quiet, but arose for a stool, of the pea-soup variety; keeps his knees drawn up, which tremble if unsupported; tongue tremulous and difficult of protrusion; pulse 92; at 3 P.M., 98, and temperature 103.6°; bowels having been many times moved, took $\frac{1}{4}$ grain mor-

phia, after which they were quiet; no red spots yet visible; abdomen moderately tender. 10 P.M. temperature 102.8°. 5th, 1 A.M., temperature 103.2°; 8 A.M., pulse 100; at noon, 104; the ears, which have been cold, are warm; nose still cold; sordes on lips; twitching of tendons; two movements in 24 hours; a few rose-colored spots are seen on the abdomen; has had morphia at intervals of 5 and 8 hours; rested well during the forenoon, but was occasionally noisy and incoherent; temperature 103.2°; 1 P.M., 103.4°; complains of pains in chest; and auscultation reveals sibilant and crepitant râles; a mustard poultice relieved the symptoms. During the week salicin has been used, as an antipyretic. To take, for the bowels, and to calm restlessness—

℞. Bismuthi sub-carb., ℥j
Spts. æth. comp.,
Glycerin., āā ℥j
Mist. amygdalæ, ℥iv. M.

A tablespoonful every two hours.

The iodide of mercury, which produces its typical effect on the liver, was discontinued.

4 P.M. The patient has a fixed eye, and the muscles stiffen, as if for a general convulsion; the ears and body generally cool; pulse 102; temperature 102.6°; respirations 33.

6th, 9 A.M. Patient, while restless at times, throwing himself about and talking irrationally, upon the whole, rested well, and slept considerably. The bowels were quiet, and he asked for the urinal when it was needed; took his mixture, with a teaspoonful of brandy, every hour; temperature 101.2°; pulse 98; tongue moist, clean at tip, and cleaning in flakes upon its general surface; tympany and tenderness unchanged; surface cool; no thirst; three movements; had emplastr. picis to chest.

7th. Woke perhaps every fifteen minutes, showing some aberration till fully awake; not restless; bowels moved once; pulse 105; respirations 34. At 1 A.M., temperature 101.8°. The fits of nervousness are preceded by flushing of the face. The surface is cool. 2 P.M., pulse 96; at 4 P.M. 106, and temperature 103°; the face, neck and ears have a purple flush; there have been two evacuations during the day; he has been very restless, and full of tossings; his speech is incoherent and indistinct; his head aches, and the exacerbations of fever are preceded by coldness of extremities and of the body generally; his tongue is protruded with difficulty; the buccal mucous membrane and tongue are covered with mucus; the pupils of the eye are dilated, but respond to light; very restless. To take 5 grains salicine every 2 hours and continue the mixture; in the night was very nervous and out of his mind. 8th, 3 A.M. Has been very restless all night; the bowels moved three times; his pulse is fuller than for two or three days past. At 8 A.M. he commenced to sweat, the pulse being 91, and the temperature 102.2°. The eyes respond well to light; the mind is rational when concentrated, wandering when not; raises his body suddenly on his head and heels. 8 P.M., pulse 96; temperature 103°; respirations 24; took morphia, grain ¼; salicin omitted. 9th, 4 A.M., rested pretty well, becoming uneasy about two hours since, when morphia, grain ⅙, again produced tranquillity. 5 P.M., temperature 102.6°. 10th, 4 A.M. Has rested quite well, taking morphia at midnight; had a stool of good consistence, and makes considerable urine; the appetite is good; temperature 102.6°. 2 P.M., is very restless and incoherent; thinks he is in two pieces. 5 P.M., took morphia and camphor water; temperature 103.2°; rested well during the night. 11th, 5 A.M., pulse 90, of good volume and good resistance; temperature, 1 A.M., 101.8°; at 12.30 P.M. the same. Taking—

℞. Elix. ammon. valerianat.,
Tinct. cinchon. comp., āā. ℥ss
Aq. camphoræ, ℥iij. M.

Once every hour. Has had two movements. 12th. Rested well during the night, without morphia; temperature, 1 A.M., 101.4°; one movement; is perspiring; calls often and im portunately for milk and fruit juices; took tablespoonful of ice cream. 2 P.M., temperature 101°; has chillness followed by fever and some delirium. 13th, 9 A.M., patient rested well, except at short intervals; took $\frac{1}{10}$ grain morphia at 5 A.M.; pulse 98; face slightly flushed; bowels once moved; temperature in the night 101°; in the afternoon he was cold, and fever and restlessness followed. 5 P.M., temperature 102°; took $\frac{1}{10}$ grain morphia and resumed salicin during the height of the fever; bowels again moved. 14th, restless, wakeful and delirious during the night; took morphia, grain $\frac{1}{10}$ at 1 A.M.; fever reported high. 12.30 P.M., temperature 102°; 5 P.M. the same; denies his identity and declares that he has a plurality of mouths; bowels moved; is to replace salicin with quinine and have half teaspoonful officinal solution of morphia when required; became restless about midnight, but did not take the solution till 4 A.M. 15th, 6 A.M. Sleeping since taking anodyne; pulse 91. 12 M., the same; temperature, noon, 102.3°; 5 P.M., 102.1°; 9 P.M., 100.8°. 16th. Rested well, taking

$\frac{1}{16}$ grain of morphia at midnight; quinia exchanged for Huxham's tincture of bark, to which was added the almond mixture and nervous sedatives; pulse 93; temperature at midnight 101.6°; 4 P.M., same; quinia resumed, as it seemed to have a favorable effect on the head symptoms; doubtless by reducing temperature. 17th. Has had a good night; pulse 84; temperature, 1 A.M., 101°; 2 P.M., 102.6°; pulse during afternoon 93. 18th. Rested well, taking $\frac{1}{16}$ grain morphia at midnight; pulse 90; temperature 101°; pulse and temperature unchanged during the day. 18th. Very restless until midnight, when morphia, $\frac{1}{16}$ grain, was taken; pulse range for day 90 to 95, temperature, 4 P.M., 103°. 20th. Rested moderately without morphia; perspiring in the fore part of the night and sweating freely in the morning hours; pulse 96; makes urine frequently, but the bowels have been rather close. To take 10 grains of quinine during exacerbation. Temperature, at 2 A.M., 103.6°; 4 P.M., the same; as also at ten; pulse 105. 21st. Pulse range for day from 92 to 98; temperature 102; passes vast amount of urine and is slightly indifferent to calls; had a costive stool. 22d. Very restless during the day; always indicates when he needs the urinal; respiration irregular, the breath being suspended several seconds at every third or fourth act; has had a very dry, hard stool; took $\frac{1}{16}$ grain of morphia, but continued restless till 3 A.M. His pulse then 92. Drinks less and voids less urine. Takes elix. valerianate of Ammonium, ℥xx, Huxham's tinct., ℥xl, brandy, ʒ ij; every hour. 6 P.M., respiration 20; regular; sleeping naturally; pulse 104; 9 P.M., 94; has had, unconsciously, a copious motion of the bowels, followed by a less one. Took a few doses of tincture krameria, and resumed bismuth and almond mixture; the patient rested well, the bowels giving no further trouble. The urine, which contains neither sugar nor albumen, continues very abundant; the calls very frequent and brooking no delay; pulse range from 96 to 102; temperature 102.2°. To take 6 grains of quinine per diem. 24th. Rested fairly, sleeping, especially towards morning, when he perspired for several hours; had two white, rather costive stools. Range of temperature 99.4° to 101.6°; sat up while his bed was made. 25th. Symptoms much as yesterday. 26th. A good night; one consistent motion; sweated freely during all the morning hours; temperature 98° to 101.6°. 27th. Repetition of yesterday. Taking the valerianate and Huxham's tincture. 28th. Costiveness continues; temperature 99°, pulse 84 to 90. 29th. Fever mostly gone; made two ineffectual attempts at defecation. To take pulv. rhei; at noon had great pains from the constipation, and from the straining for its relief, becoming very wild and ungovernable. By means of an enema of yolk of eggs and ol. ricini, with some manual assistance, the hardened masses were removed. To take elix. pepsin, bismuth and strychnia, and elix. valerianate of ammonia, alternately with syr. rhei aromat., every two hours.

30th. Temperature about normal; pulse 80; ordered—

℞. Ext. nuc. vom. fl., ℥xv
Elixir gentian cum ferri., ʒ ij. M.
Sig.—A teaspoonful every three hours.

May 1. Was restless in the night, but was relieved by aq. camph., of which he has taken a tablespoonful every two hours during the greater part of his sickness; his bowels have moved freely, and without great difficulty, although the constipation still continues in a moderate degree. Directed.

℞. Pil. ferri protocarb., ℈ ij
Ext. nucis vom., alc.,
Ext. gentianæ alc., āā ℈ ss. M.
Ft. pil. no. xl.
Sig.—Take one every three hours.

From this period his convalescence has been very rapid, his appetite being acute, and his digestion exceptionally good.

Attention is invited to the moderation, both in the frequency and range, of the pulse; to the remarkable vigor of the digestive organs; the amount of nutriment for many days being three quarts of milk, a whipped egg, and twelve ounces of almond mixture. The digestive power was equal to these extraordinary demands, except on one occasion, when the nurse acceded to his urgent demands, and gave, for the day, besides the almond mixture, a liberal amount of fruit juices, three eggs, and over four quarts of good milk. The resultant trouble was temporary, and not without its good effect in restraining his inordinate desire for food. The control of the disease by the remedies employed was rather phenomenal; the nervous symptoms being promptly ameliorated, the diarrhœa held in check, and the temperature kept within safe bounds. The final constipation I have before encountered, and it is probably due to loss of power in the muscles engaged in the peristaltic act.

—The Russian physician, Dr. Yavorski, who was in attendance on the late Ameer Shere Ali, will shortly publish an account of his journey in Central Asia.

LACERATIONS OF THE PERINEUM.

BY D. M. BARR, M.D.,
Of Philadelphia.

Read before the Northern Medical Society of Philadelphia.

I am to address you to-night upon the subject of the lacerated perineum. This is a subject upon which much has been ably said and written. The operation for its relief, has been so often and so accurately described, in works upon gynecology, as well as in reported clinics of prominent operators and specialists, that there would seem to remain but little of interest to offer you; and yet a matter of so great influence for good or evil to our race must be of some interest, by whomsoever considered, since every observer must view it in some new light.

In the hope, then, of encouraging some brother physician to offer to the suffering within his influence this simple but wonderful comfort, I will give you faithfully the subject as it has come to me.

My attention was first called to the operation for uniting this laceration by Prof. Agnew's paper, published in the Pennsylvania Hospital reports for the year 1868. The operation is here graphically described and beautifully illustrated; but I observed that, though the operation was advised by one whom I considered the best obstetric teacher of the day, yet it was performed only by a distinguished surgeon, with a strong corps of assistants. The operation seemed far beyond my reach. And some years later, when I saw my neighbor, an aged lady, obtain a new lease of enjoyable life, having for years been a miserable invalid, a burden to her friends and a loathing to herself, I thought the operator something more than man. But later one of my patients suffered more than I was accustomed to see, from a slight rupture. I asked a professor to operate; and my astonishment was great in seeing simply a paring of the mucous membrane surrounding the laceration, and bringing the pared surfaces together by the shotted silver suture, much the same as I had pared and brought in apposition the edges of the lacerated lobe of the ear, occasioned by the ear ring having been pulled through. I saw one beautiful operation by Prof. Goodell at his clinic, and took notes. I had no hesitation, thereafter, in doing the operation myself, modified according to circumstances and later teachings, and have never had reason to regret the undertaking.

Of the different steps of the operation I shall not speak, having nothing original to offer. I will say, let the clear and reasonable teachings of Emmett and Goodell, or others, be definitely and absolutely observed, in detail, and success, in all reasonable measure, must result. "Follow your guide and fear no evil," and your patients, perhaps too poor to obtain the services of a specialist, and too proud to accept charity, will pay you, and bless you for doing your own proper work.

I have no doubt many who commenced work as early as 1863-4, could to day give an experience somewhat similar to that which I will now relate.

In the year 1865 I was consulted by a lady who complained of continual diarrhœa, with inability to prevent the escape of flatus from the bowel. Upon inquiry I discovered a prolapsed uterus, and a ruptured perineum, involving the recto-vaginal septum slightly. What could I do. I then had never heard of the operation for relief. I simply replaced the uterus and supported with as small a pessary as possible, soothed the irritability of the parts by local applications, and held the bowels constipated as best I could; even for this she was grateful. Years afterward she was carrying out the same treatment, and refused my proffer to operate.

In the year 1870, I was accosted on the street by an elderly lady friend, fifty-five years old, whose misery was apparent in her countenance: "Doctor, what in the world can I do; I am in great distress; every step I take is in pain, and has been so for years." I gave her hopes, and upon inquiry, found a ruptured perineum, with a retroverted uterus. I told her of the operation for radical cure, also of the comfort a pessary might give. She chose the latter, and was greatly relieved; almost a new life was hers. I gave her directions concerning injections for cleansing, and bade her good bye. Five years thereafter she returned to me, in great misery again; I had used the soft rubber ring pessary; the rubber had decomposed in parts; the steel spring, exposed in places, had imbedded itself in the flesh; with great difficulty it was removed, the parts cleaned, and stimulating and disinfecting applications made to the parts. It was wonderful how speedily, and with what little annoyance or constitutional effect the trouble was remedied. The parts being healed, she again declined the operation, and a hard rubber pessary, as small as suitable, was used; this she wore with much comfort, until another five years, when she returned, the ring failing to support the parts; the ring was removed; the parts entirely normal, but relaxed. I

now strongly urged an operation, to which she assented, and last August the operation was performed, resulting in perfect union, and she is now enjoying a comfort unknown since the birth of her first born, twenty years before.

Last summer, a lady called upon me; she had been my patient since her marriage; some six years ago, at her first labor, in my absence (upon which I congratulate myself), she received a bilateral laceration of the uterus, also a rupture of the perineum.

In vain were all efforts to control the congestions and granular inflammations of that uterine neck; notwithstanding, a second child was born to her four years ago; her only comfort was while in gestation. During October of last year, assisted by Drs. Groff and McCreedy, the operation for laceration of the cervix was done, one week after which she had her first *painless* menstruation since the birth of her first child. On Saturday, November 7th, 1881, assisted by Drs. Groff and Heilman, the operation for laceration of the perineum was done; stitches removed on Wednesday, with every evidence of perfect union. And I am happy in being able to say a satisfactory result has thus far followed all the cases in which I have performed the secondary operation, encouraging me to repeat that, with close attention to details, as already laid down in the books, the operation may be performed, with every confidence, by any experienced obstetrician. I will say further, for the encouragement of those who may be short of assistants, in at least three other cases for whom I have operated, the only persons in the room were the patient, the nurse, Dr. Groff and myself.

But a matter of greater importance to every individual physician is the primary operation. This operation comes as an absolute demand upon every one who assumes to direct the act of parturition. The question of the proper support of the perineum is no longer dwelt upon in our schools, as formerly; indeed, in some it is not taught at all, the direction being, "If the head be delayed, place the forceps and pull it through, a few stitches will make it all right." How different this from the instructions I received; how well do I remember my respected teacher, in his lecture on the support of the perineum, folding a napkin to a soft, smooth surface, and placing it upon the distended perineum of a manikin, assuming a position to support against the advancing head. Gentlemen, said he, his face reflecting the anxious interest which should be felt at the moment when the future happiness and comfort of a suffering woman is staked upon rupture or no rupture, "how long should you hold your position here?" "I answer, one hour, two, three hours, if needed, until this head is extruded and this perineum saved. Remember the law; every perineum will properly distend, if time be given to prevent rupture." This early imbued attention to the perineum has saved many a one under my care. But in the light of our present knowledge it may be carried too far. Then, with ruptured perineum, we *bandaged the limbs* and HOPED; now we STITCH, *bandage and* EXPECT.

The question of "How long shall we wait," takes a new point of consideration. The condition of the child and mother comes earlier into the account. The powerful contractions which press the bones out of shape, and force the head into a long, projecting bog of congested blood and serum, must endanger the life of the child. I have seen, while faithfully carrying out directions "to wait at my post," a consulting physician draw a dead child through a ruptured perineum—a child lost, and the perineum not saved either. This was one of my earliest cases. I have often, since, thought how much better to have applied the forceps in time to save the child, perhaps, and spared the woman all that long agony. This was before I learned what I now so well know, that a light stage of anæsthesia, long before the profound sleep, would have spared all the pain, and added to the probability of an early delivery.

I can only answer the question of how long to wait, by the suggestion, where mother or child give evidence of exhaustion, apply the forceps, and consent to rupture the perineum.

And now, the perineum ruptured, what is to be done. It must be stitched. First, to protect the system against the probability of absorbing the vitiated secretions through a large, lacerated, absorbing surface. Second, to insure against the miseries pertaining to the lacerated perineum.

Again I will pass over the steps of the operation; they are to-day common property, "known and read of all men." My purpose is simply to encourage others to do the work; better teachers than I have studied and taught the details. I will only say, when carefully carried out, I have never failed to see satisfactory union follow.

As a part of my experience in the primary operation, and as a warning to do the work *well*, I give you my first case, a difficult labor, a consultation. Babe delivered through a ruptured perineum, and we placed two stitches. I knew nothing of the operation, and I soon discovered the attending physician knew but little more.

The parts were not carefully coapted, and failed to unite, but I hoped, at least, for as good a condition as might have been expected without stitches. I believe even this failed. The patient got up and about, but the parts discharged offensively, the system failed to strengthen, and in consequence of a further evil from exposure to sewer gas, an erysipelatous condition set up in the parts, with diphtheritic patches; in three days she died.

I will now give you my last three cases of primary operation:—

Case 2. Patient under my own care; primipara, young and strong; pains very vigorous; waited two hours; then, to save the child, placed the forceps and delivered; cord had been round neck and compressed; child breathed for a time, but finally ceased to breathe, after some eight hours. Perineum was stitched and made perfect, which remained intact through a second labor and birth of a large, healthy child.

Case 3. Patient thirty years old; primipara; parts firm and resistant, and head on perineum nearly one hour; explained to family the danger and the remedy; with their consent, delivered a healthy babe through a ruptured perineum; stitched and obtained perfect union.

Case 4. Patient forty-five years old; primipara; head delayed one hour; instruments were applied, with consent of family, and a very delicate child delivered in good condition, through a ruptured perineum, which was stitched and united perfectly.

In conclusion, I have the pleasure of saying, of the four last referred to cases, all but the first enjoyed the comfort of anæsthesia in their labor. That while they were unconscious of pain, they were never in profound sleep, and never failed to respond promptly to a question or a suggestion. The uterine contractions continued vigorous and regular throughout. The third stage was completed normally. There was no nausea, first or last. There was no hemorrhage, beyond ordinary, neither any other trouble. They awoke promptly, upon the withdrawal of the anæsthetic, and their getting up was without an untoward event; so far from being troubled by the operation for the laceration, neither of them knew of it until they were told; the last (No. 4), only when I came to remove the stitches, four days thereafter.

I have, therefore, to advise the forceps and the instruments for primary operation present at all cases of labor, especially in primipara, and to make the support of the perineum secondary to the welfare of the child.

ON THE FATAL INFLUENCE OF ANÆSTHETICS IN DISEASES OF KIDNEYS.

Abstract of a paper read before the Surgical Section of the American Medical Association, 1882,

BY LAURENCE TURNBULL, M.D.,
Of Philadelphia.

The writer dwells upon the great importance of attention to the condition of the kidneys by an examination of the urine when an anæsthetic is to be administered in a serious operation, or when a fatal result may be anticipated. The subject has not been dwelt upon with sufficient earnestness by surgical writers, or in works on anæsthetics; the first publication on this subject was by Dr. Emmett, of New York. The writer's attention has been drawn to this subject most recently, by finding that many deaths unaccounted for in any other way were due to this cause.

In the author's work (1879), he published "that the most dangerous condition in which to administer an anæsthetic is when there is renal disease, the blood being loaded with urea."

Again, before this Association, in 1880, it was stated by him, that it is now a well recognized condition, that in disease of the kidneys anæsthetics almost invariably produce coma and death.

He enumerates a considerable number of deaths from this cause, and some of them only of very recent occurrence. Also cases of death from chronic albuminuria, from twenty-four hours to eighteen days after the use of ordinary ether, as well as when hydrobromic ether was employed, but very few cases from chloroform.

After writing the above paper (March 1882), he received from Dr. Wm. F. Norris a pamphlet, in which was reported two cases of death supervening unexpectedly, after operations for cataract, which occurred in his practice (see full details in his pamphlet).

They presented four features in common: 1st. They were both anæsthetized with sulphuric ether; 2d. They entirely recovered consciousness; 3d. They died comatose, one in a few hours, the other eighteen days after the operation; 4th. In both cases a careful autopsy revealed no organic lesion, except Bright's disease of the kidneys.

The above cases before narrated, with those of Dr. Emmett's six cases of death, occurred from uræmic poisoning, while Drs. Wm. Hunt and Montgomery each had one case, verified by post-mortem examination. These go far to prove its fatal character, and need not have occurred if a proper and careful examination had been made of the urine before the anæsthetic had been given.

Dr. Agnew states, in his surgery, on the supposed contra-indication, "Ether may be given with impunity to persons suffering with renal disease;" but in his cases has he had any post mortem, to prove that death was not the result of kidney disease? As well remarked by Dr. Norris, "because fatal results do not follow in all cases, we have no right to shut our eyes to those where the employment of anæsthetics apparently leads to fatal disturbance of the renal functions."

The kidneys are the active agents in eliminating the ether from the blood, and if they are unable to perform this office, and the skin is cold, moist, and inactive, death will supervene by accumulation of mucus in the lungs, or congestion of the brain, in true Bright's disease of the kidneys.

A CASE OF TETANUS—RECOVERY.

BY W. B. POWELL, M.D.,
Of Natchitoches, La.

So far as noticed, there are three general indications for the treatment of tetanus:—

1st. To remove any local irritation which may appear to have excited the disease.

2d. To lessen the general irritability and spasmodic tendency.

3d. To restore the tone of the system.

If a thorn or any foreign substance be lodged in any part it must be extracted.

After an amputation, any spicula of bone which may have brought on the disease should be removed. A punctured wound should be dilated or cauterized, or a nerve divided, as the case may be.

On the morning of June 5th, 1877, Mr. C. B. T. came into my office, and consulted me in regard to his cook, a young woman, aged 19 years.

After closely questioning him, he *did* manage to tell me "she had a pain in her left shoulder and back;" her bowels were constipated.

I prescribed a cathartic and quinine, presuming the pains were due to malarial fever. At five o'clock of the same day he returned, and remarked that Miss. B. (the patient), still suffered. I gave him a sedative, and told him to bring her to my office the next morning (the 6th).

Promptly at the hour appointed the patient came to my office. I asked her to tell me her exact condition. Upon her attempting to speak I observed, to my great dismay, the characteristic "*sardonic grin*," which so well marks tetanus. It was not until then that I found out her true condition. This young woman, ten days previous to my first prescription, stuck a large splinter in the centre of the plantar surface of her right foot, to the extent of three-fourths of an inch; she tried to get it out, but did not succeed, so allowed it to remain, thinking it would "work out." Upon examination, I found the wound closed, and very painful on pressure, causing a severe prickling sensation. I enlarged the wound, and removed the splinter, and seared the part well with a small iron rod (one eighth of an inch in diameter), brought to a dull red heat. Severe tetanic spasms, to an alarming extent, at nine o'clock that night, which I quieted somewhat with chloroform inhalations. I remained with patient till morning. Ordered—

℞. Choral hydrat., ℈ ij
Sulph. morph., gr. ss.

which caused her to rest for a couple of hours, at the end of which time her bowels moved from the cathartic given two days before; she then slept one hour, when she was awakened by a spasm. I ordered ℈ j sulph. quin., dissolved in brandy and warm water, thrown into the bowels, also a hypodermic injection of ⅛ gr. morph, and 5 grs. chloral; left her asleep half an hour after. Morning of the 7th, 4 o'clock, ordered brandy ℥ j, chloral ℈ j, every hour, and the room kept warm and dark. I returned at 9 o'clock of the same morning; found my patient asleep, slight twitchings, jaws a little relaxed but somewhat stiff. Made no change in treatment; returned at 7.30 P. M.; found patient worse; had had spasms all afternoon; some fumbling, meddlesome person came in, opened all the doors and windows, which caused a great draught to blow on the patient, and at the same time ordered "Cockroach tea." I increased the dose of chloral and brandy, with an enema of ℈ j sulph. quin. and morph. ⅛ gr. Patient slept until 2 o'clock, A. M. (8th), when menstrual flux made its appearance. From that time the paroxysms became lighter, until the morning of the 13th, when she concluded to step out of doors. This piece of imprudence caused her trouble for a day or two. During the whole of the treatment I kept up strictly the third indication, restoring the tone of the system by wine, iron, quinia and diet, On the 25th of the month I discharged the patient, well.

I want to say a word in regard to "Cockroach tea." I was highly amused at the idea, and thought I would experiment a little.

The following is the formula: One dozen fat female cockroaches, put into a pint of boiling water (after being bruised), let stand a couple of hours, then strain well, add two tablespoon-

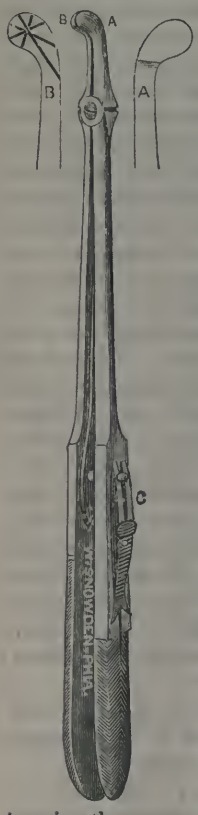
fuls of brandy and ℥j of crushed sugar; stir till thoroughly dissolved. Of this filthy stuff my patient was made to take two tablespoonfuls every hour. I being away upon one occasion, my chloral mixture was neglected for a whole day—discontinued—owing to carelessness, and during this time the "cockroach tea" was kept up by the "grannies." Upon calling next day I found the patient doing well.

Gentlemen of the profession, I ask, is there any virtue in the cockroach (male or female), or its active principle (Blattiden), in the treatment of tetanus?

A CONVENIENT ASEPTIC NEEDLE FORCEPS.

BY WILLIAM A. BYRD, M.D.,
Of Quincy, Illinois.

About two years since, when operating upon a cleft palate, I became satisfied that too many instruments were used, and more particularly was I dissatisfied with the number of handled needles necessary. To overcome this difficulty I had a pair of forceps made, similar in some respects to the one in the cut. By using a common trocar-pointed needle, from one-half to five-eighths of an inch in length, to carry the suture, with forceps bent at an angle, as in the cut, I found that I could pass the needle and then reverse the point and pass it through the opposite side of the palate from above, much more readily and quickly than the same suture could be carried by any handled needle with which I was acquainted. I have since used it in operating for cleft palate, laceration of the cervix uteri, and, in fact, all kinds of operations where needle forceps were needed, with great satisfaction. Being fastened with a slide catch, they are worked by the same motion of the hand that the surgeon is used to in using the common slide catch artery forceps. The wedge shape of the slide (C) permits the use of needles of varying size, and of their being gripped as tightly as necessary. One side of the jaw (B) has serrations, while the other (A) is faced with pure copper, which does not wear out so quickly as white metal. Being made of metal, they are not so bulky as forceps with wooden handles, and will not absorb septic matters, as the porous wooden ones do. The handles being file cut, are no more liable to slip in the hand of the surgeon than the more unwieldy instrument. I had several pair made before I got just what I wanted, but the accompanying cut represents the forceps as made by Mr. William Snowden, of Philadelphia. I do not wish a better instrument.



Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROF. W. H. DRAPER.

Reported by H. H. Seelye, A.M., M.D.

Rheumatism.

This case which I now show you, gentlemen, has already passed its most interesting period, but as it illustrates very well a very common disease, I will have the history read, and then I wish to make a few remarks.

History.—Patient is a young woman, 17 years of age, and is a native of Ireland. Does not use alcoholic liquors, gives no history of syphilis, and has never before had rheumatism. She does not know of any rheumatism in any of her family, except that an older sister has had two attacks. She herself has always enjoyed good health until December 2d, when she was attacked with pain in her shoulder, and afterwards in her knees, ankles and wrists. This was followed by swelling and great tenderness of the joints; and this was her condition at the time of her admission on December 8th. Her pulse was 90 per minute, respirations 16, and temperature 102.2°. Her urine was normal in amount and contained no albumen or casts; specific gravity 1.026. She is well nourished, and looks healthy, but her ankles and wrists are swollen and tender. The apex beat is felt in the fifth intercostal space and a little to the left of the line of the nipple. There is a systolic mitral murmur heard at the apex. The lungs show nothing abnormal, and the liver is of the usual size. Her bowels are regular. She says she had not been exposed to cold or wet before the attack.

This, gentlemen, is a very typical history of an acute inflammatory rheumatism, or as it is sometimes called, a rheumatic fever, occurring in a young, healthy girl, seventeen years of age. The first point in the history that attracts our attention is the fact as to heredity. She says she knows nothing of this disease in either of her parents, but she has one sister who has twice had attacks of rheumatism. This is sufficient, however, to show a tendency in her family to this malady; and you will almost always be able to find in the family history of a patient with rheumatism something to justify you in the opinion that there is a family inheritance of this

affection. In some families this is very marked. Where one or both parents have been subject to gout, you will sometimes find that the children are liable to suffer from acute articular rheumatism, that is to say, from attacks of true rheumatic arthritis. There seems to exist in the children of gouty parents a special tendency to vulnerability of the joints; and that particular form of catarrhal inflammation which is liable to follow from exposure to cold and wet, and to settle in some vulnerable part of the body, is very apt to be developed in these children.

The next point to be considered is the question as to what was the exciting cause in this case. There appears to have been no very striking cause here, for the attack came on suddenly, without any previous imprudence on her part. But you will usually, in young people, get a history of exposure to wet or cold. And the same conditions will also give rise to this as are liable to provoke a bronchitis, pleurisy or pneumonia. When, on the other hand, you come to adults, you will find that there is often something more than exposure to account for these attacks. For you will find them common in persons who have been given to excessive indulgence in malt liquors and wines, and in whom there exists, in consequence, a defective or perverted nutrition. Sometimes there is a distinct traumatic character in the etiology. And this is especially the case among the laboring classes and with those whose occupations necessitate fatigue of the joints. Such, then, are some of the exciting causes of rheumatism, and the predisposing causes are family inheritance, and the existence of a rheumatic habit of constitution, the acquisition of which may be accelerated by a vicious course of living.

The next point to which I will call your attention is the symptomatology, as it was demonstrated by the history of this case. She does not appear to have been very acutely attacked, for she had no chill, and the first symptom which she developed was pain in the shoulder, and then in the knees, ankle and wrist. And this was followed by swelling of the joints, and when she came in they were very tender and painful, and she had a moderate degree of fever. Since she was brought in the temperature has at no time risen to as high a point as it then was; and although she was then suffering very acutely, as soon as she was put to bed and the joints were protected and kept from moving by the crib which you now see, the pain subsided markedly, and she has since been free from suffering, and is now fairly comfortable.

In the history of her symptoms at the time of and since her admission, special note was made of the condition of her heart. This was done because in this disease you have always to fear cardiac complications; and you should, therefore, never omit to make frequent and careful examinations of the chest in every case of rheumatic fever which comes under your observation; for sometimes the onset of this complication is insidious, and it requires on your part special attention to the objective signs, in order to detect it at the earliest moment possible. Now this young woman had, on her entrance, a systolic murmur, heard most distinctly over the mitral valves and transmitted thence to the apex, and also to the other regions of the heart. But it was a murmur of no great intensity, and there was no accompanying enlargement of the heart, and no signs of pulmonary congestion, and no irregularity of the heart's action, nor any signs of endocardial disease other than the murmur. Now, therefore, the question arises, whether, in such a case, we have, in the mere presence of a murmur, sufficient evidence on which to base a diagnosis of cardiac disease, with a valvular lesion. As I told you not long ago, you must always seek for other subjective and objective signs in order to diagnose the existence of an organic disease of the heart; for a murmur alone is not a sufficient evidence. But in this case there were no conditions present to suggest a cardiac complication. For there was no dyspnœa, or præcordial distress, and no irregularity or unusual frequency of the pulse, and no palpitation or enlargement of the heart, and nothing but a soft murmur heard over the mitral orifice and transmitted to the apex, to suggest an endocarditis. Now, is it fair, under such circumstances, to say that the patient has endocarditis, or ought we to treat her for such a disease? There was a time when a murmur was considered as sufficient evidence of this complication, and blood letting was the appropriate remedy. So M. Bouilland was in the habit of bleeding a patient whenever he found a murmur; and when he did not find one, he bled the patient for the disease itself. And as a result, in his statistics on rheumatism, the proportion of cardiac complications was very much larger than that of any other practitioner. So clinical observers, since his day, have been accustomed to consider that he himself caused most of his murmurs, by reason of the extensive anaemia which repeated blood-lettings produced.

But we know now that simple anæmia is not the only cause of functional heart murmurs. For in the course of inflammatory disease we can frequently get a soft murmur at the apex, and less frequently at the base. But we do not look upon this as an evidence of endocarditis. but rather as a temporary murmur depending on a temporary cause, connected in some way with the febrile state and inflammatory condition. And I believe that this is the true explanation of a good many of the murmurs heard in connection with attacks of rheumatic fever. So, as I said, unless there are some subjective phenomena besides, I do not think it is safe to make a diagnosis of endocarditis in these patients. I feel reasonably certain, therefore, in this case, that the murmur which she had on admission, but which has now disappeared, did not indicate any serious endocardial mischief. And though you must always be on the watch for such a complication, you should never, I repeat, base its diagnosis on the mere presence of a murmur.

Now, I wish to call your attention to one other murmur commonly heard with considerable intensity over the base of the heart, and sometimes over all the præcordial region, in a patient who is convalescing from a rheumatic fever. This is a blood murmur, in the great majority of cases due, perhaps, to a poverty of red globules; and there is no other acute disease which seems to

have so destructive an effect upon the red blood corpuscles as acute inflammatory rheumatism. These patients are always more or less reduced; they have extreme anæmia, and this gives rise to a functional murmur, which disappears as their condition improves.

Treatment.—This young woman, after her entrance, was immediately put upon the salicylic treatment, and she was given ten grains of salicylic acid, every two hours, that is, at the rate of one hundred and twenty grains a day. And with her, as in the large majority of patients, the relief came within twenty-four hours. The pain, tenderness and the discomfort were lessened and the fever subsided, and I may say, in fact, that she entered upon convalescence within the first twenty-four hours after she was admitted. This speedy relief is not the uniform result of this plan of treatment, but it usually takes place within two or three days, at the most. I think it is fair to say that no other plan of treatment has ever been devised which is so uniformly successful as that by salicylic acid. There is another interesting fact in connection with this plan of treatment, and the alliance which is supposed to exist between acute inflammatory rheumatism and gout. For it is found that salicylic acid may be given with much success in the majority of cases of gout. And perhaps there is no other remedy, except colchicum, so good for this affection. This seems to suggest that both diseases have the same origin, and that the acid acts by neutralizing the poison upon which the existence of both depends.

Pneumonia.

The patient, Mrs. B. B., is a widow, born in Ireland, and a servant by occupation. Admitted December 6th. She has seven children, the youngest of whom is 20 years old. She is herself 50 years of age. She has never had rheumatism, malarial fever, or any other serious illness. She has recently been employed as a cook, and has been in the habit of getting up early in the morning to make the fire, and walking upon a cold, damp floor, with bare feet. So she thinks she caught cold four days before she came here, for at that time she began to feel sick, and then she became troubled with loss of appetite, nausea and vomiting, and with headache, vertigo, and a feeling of great prostration, and she could take no nourishment. For the first day or two she felt a pain across her back and between her shoulders. She has had considerable fever, and has grown steadily weaker. She says she does not use alcoholic liquors, but she drinks large quantities of tea. At the time of her admission her pulse was 120, respirations 44, and temperature 103.8°. She was poorly nourished in appearance. There was no œdema, but there was atrophy of the superficial areolar tissue about the breasts and under the clavicles. There was slight tenderness and pain upon pressure, in the epigastric and umbilical region. There was no cough and no eruption, and no intestinal gurgling or general abdominal tenderness. She at times raised a thick, viscid, rusty-colored expectoration. Upon physical examination, there was found to be but feeble respiratory movement over the right side anteriorly, and the expiration was prolonged. Posteriorly upon the right side, over the lower half of the lung, was obtained tubular breathing, and bronchophony and dullness on percussion. There were no râles.

Gentlemen, by looking at this chart which I hold, containing the trace of her temperature since she came in, you might easily guess at the nature of her disease. It is plainly a case of lobar pneumonia. You must have been struck with the peculiar character of the patient's subjective signs at the time of her entrance. For she did not complain then of pain, and she had no cough and no eruption, and she was suffering from nothing but a high fever and the prostration which accompanied it. Without a careful physical examination, you would probably have overlooked the true cause of this fever, and you would have taken it for a continued fever. But an examination of the chest reveals a lesion in the inferior portion of the right lung. With this there was a temperature of 104°, and a correspondingly rapid pulse and respiration. This high temperature continued throughout that and the following day, and on the seventh day of the disease there was also extreme feebleness of the pulse and of the systole of the heart, and great prostration. She was put upon large doses of alcohol, to relieve these alarming symptoms, and she received eighteen ounces of whisky in the first twenty-four hours, and the same amount in the second, and in addition carbonate of ammonia and digitalis were administered, and every effort was made to increase the strength of the heart and to tide her over until the time should come for a natural subsidence of the fever. On the night of the seventh day there was a decided fall in the temperature, and on the morning of the eighth it was down to 101°, and on the morning of the ninth it was subnormal. There is no question in my mind, therefore, but that the vigorous plan of treatment pursued during the acute period of the disease saved her life.

Now think for a moment of the difference between this plan of treating pneumonia, and the treatment by depletion and blood-letting which was pursued twenty-five years ago, before the times of Todd, who was the author of the plan of actively treating pneumonia, and to whom we owe the sthenic method of treating sthenic diseases. I do not doubt, and there is abundant testimony to prove the fact, that a young and vigorous subject will go through the whole course of this disease, even though there be a pretty high temperature, safely and with no medication. But when, in any case, there is good evidence, from all the symptoms, of great prostration, then you must not hesitate for a moment to stimulate the patient, no matter what is his age, and you must stimulate vigorously up to the time of defervescence. But you must not always, after the period of defervescence has arrived, be in haste to stop entirely the stimulating treatment, but the quantity of whisky should be gradually diminished from day to day. Thus, we are still giving the patient eight ounces a day, and she is not disagreeably affected by it, and she also takes still the carbonate of ammonia at night, and the digitalis as well. You must bear in mind the fact, that a patient is always weaker at night, and you should therefore give larger quantities of stimulants then than

throughout the day. There is a sort of a physiological cycle in our vitality during the twenty-four hours, which is to be remembered. It is found that the period of lowest vitality is during the twelve hours between six o'clock in the evening and six in the morning, or more definitely, between three and four o'clock in the morning. Then during the morning the vitality rises again, and continues to do so throughout the day, until evening, when it begins to fall again. For this reason you find that the greatest reflex disturbances occur very early in the morning, and this is the period of greatest reflex excitability. So asthmatic attacks are more likely to begin at this time than at any other hour of the day, and the same is true of epileptic fits. And a physiological proof of the same thing is in the fact that the larger proportion of births, as well as the larger proportion of deaths, occurs in the early morning hours. Therefore I say that the time for vigorous stimulation is during the later and the very early part of the day, and you should moderate the amount towards midday, and again increase it at night, and crowd it especially between three and four o'clock in the morning. It is very important that you should bear these facts in mind.

Apoplexy.

The next patient was a woman, forty-five years of age, a native of Ireland, married, and with no regular occupation. Admitted to the hospital December 10th. She has never had rheumatism, or malarial fever, or scarlet fever. Gives no family history of rheumatism or paralysis. For the past two years the patient has noticed that she was passing more urine than usual, and she often had to get up during the night to empty her bladder. She has had no œdema of the feet or ankles, or elsewhere. Six months ago, about ten o'clock one morning, while she was scrubbing the floor, she was suddenly attacked with paralysis, and complete loss of consciousness. She remained unconscious all day, and when she came to herself again, she found that she could not move her right arm or leg, and there was loss of sensation over the whole of the right side of the body. But sensibility was gradually restored. She was also aphasic for the first four days, but this, too, subsided by degrees. She has had no disturbance of vision, and no hallucinations, and she has not passed her urine or fæces involuntarily since her attack. But she has frequent desires to urinate, and passes large quantities of light-colored urine. Has had no bedsores from lying constantly on the paralyzed side. She complains of pain and soreness in the occipital and posterior cervical muscles. She has a cicatrix upon the tibia, which she says is due to an ulcer which she had there two years ago, and which healed of itself. She gives no syphilitic history. There have not been any muscular spasms or twitchings in the affected limbs, but for the past two weeks there has been complete rigidity of the parts, and the muscles are steadily contracting and producing a permanent flexion of the joints. At the time of her admission her pulse was 110, respirations 20, temperature 99.8.° As to her physical condition she was poorly nourished, had no œdema, and was paralyzed completely in her right arm and leg; but there was no loss of sensibility. There was a slight degree of facial paralysis, shown by a drawing up of the left angle of the mouth, and an inability to completely close the right eye, or to protrude the tongue without a deviation of it towards one side and by a constant dribbling of saliva from the mouth. There was still considerable impediment of speech, and she could not pronounce the labial consonants correctly. She was very emotional, and would cry at the least provocation. The radial and temporal arteries felt stiff and hard. A systolic murmur was to be heard over the aortic valve. The area of præcordial dullness was increased, and the apex beat was felt in the sixth intercostal space, and to the left of the nipple line. There was nothing unusual about the pulmonary signs. The urine contained no albumen or casts.

The history of this case, gentlemen, presents many interesting points, but not so much for anything in it which is unusual, as for the fact that it illustrates the characteristic features of the disease from which she is suffering. She is a woman not yet far advanced in years, but, as I have told you before, age is not to be measured by years. If you will put your finger upon her radial artery, you will find there a better evidence of senility than her years will furnish, for it is hard and cordy to the feel. This is a condition of the arteries which is common enough in advancing years, and it is generally looked upon as a senile change, and a degeneration of the structure of the arterial walls as the result of age. But it is a question whether it is fair to speak of this simply as a senile change, and whether it is not always induced rather by causes which are independent of years and of the ordinary life of the tissues. For you sometimes see it in very young people, and it is found to coexist with certain habits of life and with certain diseases, so that it cannot be regarded simply as a natural degeneration, and an indication that the full term of life has been reached in these tissues. It is found, for example with extreme frequency in constitutional syphilis, and perhaps the most serious consequences of syphilis is this arterial degeneration, for it is this which gives rise to the large proportion of aneurisms which occur in the deeper portions of the body in syphilitic persons. It is also a disease which appears to result from a general endarteritis in persons of a gouty habit, who are not advanced in years, but who have led what are called "fast lives," and have been accustomed to use freely fermented alcoholic liquors, and in persons who have all their lives been sufferers from that peculiar condition of the blood which is known as lithæmia, in which the blood is loaded with an increased quantity of nitrogenous products, and it therefore provokes an inflammation of the coats of the arteries. This accounts for the large proportion of stiffened blood vessels seen in young persons. The connection between this vascular degeneration and apoplexy is a very close and important one.

The history of this woman indicates that she had six months ago a cerebral hemorrhage into the left side of the brain, probably in the vicinity of the ventricles, and in the motor tract, and

in the vessels of the corpus striatum, but limited in extent, although large enough to produce a loss of power upon the right side of the body, which has not yet been recovered from. This hemorrhage may have been the result of a weakened condition of the arterial walls, or it may have been due directly to the bursting of a small aneurism, such as are liable to occur in the brain, or in other parts of the body where there is but little support to the walls of the blood vessels. These are called miliary aneurisms, and they form very readily in the cerebral tissue.

Another important point brought out in the history, and a very common occurrence in these cases, is the association with them of an enlarged heart and valvular disease. Here it was noted that the apex beat was in the sixth intercostal space, to the left of the nipple line, and the area of præcordial dullness was increased, and there was an obstructive aortic murmur with distention of the left ventricle, as is common in such cases. It is important to remember, however, that in connection with arterial disease you will almost invariably find an enlargement of the heart independent of any valvular trouble, and as a consequence of the increased power necessary for the heart to overcome the resistance caused by this arterial degeneration. It is quite necessary, in fact, that there should be cardiac hypertrophy. But you will find very frequently, as here, that the cardiac hypertrophy and dilatation are partly the result of diseased vessels, and partly the consequence of an aortic obstruction. Another condition commonly found in connection with apoplexy and arterial degeneration is the occurrence of the fibrous, atrophied kidney, or, in other words, a chronic interstitial nephritis. The evidences of the existence of this complication in this woman have not been accurately made out. But the fact that she passes large quantities of pale-colored urine is suggestive. And though her urine since she came in has been normal as to its chemical constituents, yet I will have frequent examinations of it made hereafter. For albumen is often absent in these cases, for a considerable period, and then it appears again. So I do not feel at all certain that we have not here that triad of phenomena which is so suggestive of a tendency to cerebral apoplexy, namely, diseased arteries, cardiac hypertrophy and granular kidneys. This is a triad which you will not unfrequently meet with, but when you do meet with it you may confidently expect to see a large proportion of the cases terminate in cerebral apoplexy.

Editorial Department.

Periscope.

Treatment of Acute Chorea by Massage and Free Administration of Nourishment.

Drs. James F. Goodhart and John Phillips contribute a valuable paper on this subject to the *Lancet*. This method of treatment, as suggested by Dr. Weir Mitchell, was practiced on several hospital patients. While the success was not marvelously great, the following advantages may be claimed for it, and the authors consider it a method of treatment deserving of trial: 1. A decided increase in weight; 2. Rapid subsidence of all the more violent movements, and it has happened that after two or three days' treatment a child, quite uncontrollable, has been able to sit up in bed, in a fairly quiet mind; 3. The extremities are no longer cold, and, as a further evidence of the good influence on the circulation, the pulse falls and becomes more regular; 4. Shampooing is a powerful sleep producer. There has never been any dislike of the treatment expressed, neither has there been any dyspepsia, as might be expected from the excessive feeding.

On admission, the patient is put into a padded bed. Milk only is given for three days; during this time the movements are carefully watched, grasping and articulating power noted, and bowels regulated. If the movements show no sign of abatement, massage is begun twice daily for fifteen minutes for the first seven days, and for twenty minutes afterwards. The diet-table for the first and second weeks is given below. The temperature and pulse are taken immediately before and after massage. The patient is weighed every week.

The following tables give the diet and results in one case, that of a girl aged 10 years, who was suffering from a second attack of chorea. She could not walk; threw herself about in bed; tongue bitten; no grasping power; cannot articulate; bursts into a paroxysm of shouting and crying if looked at; cannot swallow, the food dribbling out of her mouth. The other cases were treated on a similar basis.

Diet: At 5.30 A.M. half a pint of warm milk; 7 A.M., half a pint of milk, and three slices of bread and butter (each slice to weigh 1 oz.); 9.45 A.M., half an ounce of Kepler's malt extract, in lemonade; 10 A.M., massage (fifteen minutes), followed by half a pint of warm milk flavored with cinnamon-water; 12.30 P.M., rice pudding, half a pint of milk, green food and potatoes; 4.15 P.M., half a pint of warm milk, three slices of bread and butter, and one egg (half boiled); 7 P.M., half an ounce of Kepler's malt extract in lemonade; 7.30 P.M., massage for second time, followed by half a pint of milk immediately.

		Morning.		Evening.	
		Pulse	*Tem.*	*Pulse.*	*Tem.*
Feb. 21[1]	Before massage	120	99.2°	104	99.2°
	After "	118	97.0°	100	96.8°
" 22[2]	Before massage	108	98.8°	112	97.2°
	After "	120	97.8°	100	97.4°

[1] Much quieter after morning massage, and slept well for six hours during the night.

[2] Was spoken to and handled without any emotion; has complained of no pain; does not object to massage in the least.

		Morning. Pulse.	Morning. Temp.	Evening. Pulse.	Evening. Temp.
	Quite quiet for 3 hours, but no sleep.			4 hrs. sleep fol. by 2 more.	
Feb. 23[8]	Before massage	112	98.8°	112	97.2°
	After "	100	97.2°	114	96.6°
				Slept well all night.	
" 24[4]	Before massage	100	98.8°	104	97.6°
	After "	96	96.8°	94	95.8°
	Slept 1 hour after massage.			Slept immediately after; no night terrors.	
" 25[5]	Before massage	96	97.4°	96	97.2°
	After "	88	96.0°	88	96.2°
" 26	Before massage	92	97.2°	100	97.2°
	After "	88	97.0°	96	97.0°
" 27[6]	Before massage	96	96.0°	86	98.2°
	After "	92	98.0°	90	97.0°
	Quite quiet for 2 hours.			Slept well all night.	
" 28[7]	Before massage	72	97.0°	80	96.0°
	After "	68	95.8°	72	95.6°
Mar. 1	Before massage	72	97.8°	80	97.0°
	After "	68	97.2°	72	97.0°
" 2[8]	Before massage	120	100.8°	128	101.0°
	After "	118	100.0°	120	100.8°
" 6[9]	Before massage	96	97.2°	84	97.0°
	After "	92	97.0°	80	96.6°
				Slept well.	
" 7	Before massage	80	97.8°	96	97.8°
	After "	72	98.0°	92	98.0°
	Slept 2 hours immediately after.				
" 8[10]	Before massage	80	98.0°	96	98.6°
	After "	76	97.0°	88	98.2°
" 9[11]	Before massage	80	98.8°	104	99.8°
	After "	76	98.0°	100	98.8°
" 10[12]	Before massage	96	99.0°	104	99.2°
	After "	92	98.0°	96	98.2°
" 11[13]	Before massage	80	99.2°	88	98 0°
	After "	76	98.2°	90	98.8°
" 12[14]	Before massage	80	99.2°	80	98.0°
	After "	76	98.0°	74	98.0°

[3] Movements are already diminished; she can take milk with much less "slobbering"; articulation better.

[4] Tongue protruded much more regularly; tongue has not been bitten; no night terror.

[5] "Systolic" murmur very slight, and presystolic has disappeared; can articulate the word "Better" when spoken to.

[6] Systolic bruit has quite disappeared; can to-day articulate her name; takes all her food well; tongue protruded straight; grasping power weak.

[7] Weight 3st., 11lb, 12 oz.

[8] Last night some Kepler's malt extract was given which had been open for some time; this caused an epidemic of diarrhœa in those patients taking it. A mixture of opium and bismuth was given, and massage was stopped for three days.

[9] The systolic murmur has returned. In consequence of this illness she lost 1lb. 3 oz. (3st., 10lb, 9 oz.)

[10] Diet as before, except at 7 A.M., half a pint of warm milk and four slices of bread and butter; 12.30 P.M., chop (meat cut from bone, no fat), rice pudding, etc., 4.15 P.M., half a pint of warm milk and four slices of bread and butter, another pint of milk distributed over the twenty-four hours.

[11] All difficulty in swallowing has disappeared; systolic bruit scarcely audible; movements much less.

[12] Fed herself twice yesterday; can articulate ordinary sentences.

[13] Takes all her food well; sits up in bed; is able to hold a spoon.

[14] Muscles have become so resistant, from increase of their volume and tone, that massage is very difficult; sleeps well all night, and an hour or so after morning massage.

		Morning. Pulse.	Morning. Temp.	Evening. Pulse.	Evening. Temp.
" 13[15]	Before massage	76	99.0°	80	98.0°
	After "	70	98.0°	76	97.0°

All active movements have ceased, and she has now nothing but the occasional twitching usual in these cases. Massage was kept on for fourteen days longer, in the hopes that these too might disappear, but although they were materially lessened, and entirely ceased in three weeks, the diminution was scarcely marked enough to say that it was caused by the treatment.

We must insist on the fact that the treatment we advocate is for the acute stage of chorea, not the chronic, although (as will be seen from perusal of the above) much benefit may indeed be derived from it, even in these latter cases. "Massage," and the mode of performing it, is well described in Weir Mitchell's book, "Flesh and Blood, and how to make them." There are two or three essential points, however, to bear in mind: 1. Fifteen minutes twice a day, increased at the end of seven days to twenty minutes, is as much as the strongest child will bear. 2. After the operation the warm milk should be given and the bed-curtains closed, and all noise stopped; sleep then generally follows. 3. Neat's-foot oil, if used alone, often produces small boils, which cause the patient a good deal of discomfort. A mixture of an equal amount of olive oil will be found to obviate this trouble. 4. Care should be taken to give the Kepler's malt extract *fresh*. If any fermentation has taken place troublesome diarrhœa will probably result.

[15] Weight 3st., 12lb, 10 oz., an increase of 2lb in seven days.

Scurvy and Fresh Meat.

In commenting upon the report of Dr. W. H. Neale, Medical Officer of the Arctic steamer *Eira*, the *Lancet* says:—

The most interesting of Mr. Neale's observations, however, is that which relates to the absence of any symptoms of scurvy among the men—a fact which has led him to express the opinion that if men live on the flesh of animals indigenous to the country, even without vegetables, they will run very little risk of scurvy, so that, under such circumstances, lime-juice is not of much use. Curiously enough, while Mr. Neale is detailing his experience with regard to the prophylactic value of fresh meat against scurvy in the arctic region, Dr. Lucas writes to us from India, stating that the meat eating tribes of the northwest provinces are comparatively free from scurvy, while the vegetable-feeding tribes are not unfrequently attacked with the disease. This experience of both arctic and tropical observers, which does not stand alone, is so entirely distinct from European experience, that some solution of the apparent paradox is required. In a letter which we publish in another column, a correspondent points out that the statements of Mr. Neale and Dr. Lucas need not be considered as in any way upsetting our established views with regard to the disease, since, as he urges, meat is probably a scorbutic and an anti-scorbutic article of diet, according to the period of time that elapses from the time of slaughter

to the period of cooking. Fresh muscle, as is well known, has an alkaline reaction, due to the presence of the neutral sodium phosphate; after rigor mortis has passed off the reaction becomes acid, due to the development of lactic acid; the neutral phosphate is thus converted into acid sodium phosphate. In hot countries the meat is eaten so freshly killed that lactic acid is not developed; in arctic regions the cold stops its formation; in European countries, where meat is usually hung, there is ample time for its generation. Thus in tropical and arctic regions the muscle plasma is alkaline when cooked, in European countries acid. If, therefore, it be true that scurvy is produced by a diminution of the alkalinity of the blood—a view originally put forward by Garrod and subsequently confirmed and extended by Dr. Ralfe—then we can conceive how fresh meat may be anti-scorbutic, while hung meat will have an opposite quality. Lastly, Mr. Neale is to be thanked for his suggestion of the use of blood as an anti-scorbutic. If its employment on future occasions should further prove its prophylactic value with regard to scurvy, we shall expect to see it extensively used by our mercantile marine, while under any circumstances, it introduces to the notice of travelers and voyagers a food at once portable, nutritious, and wholesome.

The Influence of Tobacco Smoking on Temperature and Pulse.

The *London Medical Record* says that, in order to ascertain the influence of moderate tobacco-smoking on temperature and pulse in normal subjects, Dr. J. V. Troitzky (*Vratch*, 1882, No. 7) made 600 observations in twenty-five persons, grouped into three categories, according to their constitutions: 1. Those of delicate constitution; 2. Those of ordinary constitution; 3. Those of strong constitution. The observations were made twenty times daily, from 9 A.M till 12 P.M. The author summarizes his results as follows:—1. In persons of ordinary constitution, on non-smoking days, the average daily temperature was 36.76 deg. C. (98.16 Fahr.), and the pulse 72.9; on smoking days, the respective figures were 37.02 deg. Cent. (98.64 Fahr.), and 89.9. In persons of delicate constitution, on non-smoking days, the average daily temperature was 36.6 deg. C. (97.88 Fahr.), and the pulse 69.3; on smoking days, the figures were 37.03 deg. C. (98.64 Fahr.), and 81.2. 3. In strong persons, on non-smoking days, the figures were 36.8 deg. C. (98.06 Fahr.), and 72; on smoking days, 37.02 deg. C. (98.64 Fahr.), and 82.6. 4. In persons of all three categories, the mean temperature and pulse on non-smoking days, were 36.73 deg. C. (98.11 Fahr.), and 71.55; on smoking days, 37.02 deg. C. (98.64 Fahr.), and 81.24. Expressing the conclusion between averages for smoking and non-smoking days, in form of geometrical proportions, we have the following figures: *a*, in ordinary persons, for the temperature 1007: 1000, and for the pulse 1230: 1000; *b*, in delicate persons, 1010: 1000 and 1170: 1000; *c*, in strong persons, 1006: 1000 and 1150: 1003; *d*, in persons of all categories, 1008: 1000 and 1180: 1000. [That is, tobacco-smoking produces a stronger influence on the pulse than on the temperature. The author considers even moderate tobacco smoking hurtful to healthy systems. Nobody ever denied that tobacco smoking influenced the temperature and pulse of a smoker; the question is only, whether this—at all events, not very considerable—influence is really harmful to the system.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the Annual Announcement of the Toronto School of Medicine for the current year.

——*Godey's Lady's Book* continues to furnish excellent reading for the household, pleasant and beautiful stories, matters relating to dress, household and the care of children, the latest fashions and handsome steel plates, all making a journal of a very satisfactory kind to the family circle. Published at 1006 Chestnut street, Philadelphia. Price $2.00 per year.

——A description of elephantiasis arabum, as it occurs in the Samoan Islands, is given in a reprint by Dr. Arthur C. Heffenger, U.S.N. He states that there is no correct description of the disease in medical literature. The only remedy seems to be excision, which is generally successful. The author describes a case where he removed a lymph scrotum weighing 35 pounds.

——We have received the Transactions of the South Carolina Medical Association, a volume possessing much interest. The President's Address, on "Primary and Secondary Reunion of Divided Nerves by Sutures," is a peculiarly valuable contribution to the literature of this important subject. A paper on the treatment of catarrh, by Dr. S. Baruch, is very practical and worthy of perusal, as are many others of the short and concise papers forming the volume.

——The whole miserable history of Guiteau and his actions has been of no practical value whatsoever to the medical profession; he has been fairly tried and executed, and the country is weary of reading about him. The notoriety which has been given to his base and aimless life can only be productive of injury by inciting other egotistical and weak-minded creatures to achieve publicity in some similarly unfortunate manner. Therefore we can have but little sympathy for the reprint from the *American Journal of Neurology and Psychology* on "The Autopsy of Guiteau." Hundreds of equally important and instructive autopsies are annually made in our almshouses, and are very little talked about.

——We have already told our readers of the reported success with which Dr. Robert Newman, of New York, has treated stricture of the urethra by electrolysis. We have now received a reprint from the *New England Medical Monthly*, of an article by the same gentleman, on "Stricture of the Rectum Treated by Electrolysis.' The author relates four cases in which he derived very good results from this method of treatment, and concludes that, "malignant and syphilitic causes excluded, stricture of the rectum may occur as a sequel of any inflammation in the tissues of the rectum itself, or by encroachment of diseased tissues surrounding the part.

"As no known treatment formerly employed has given satisfaction, the electrolysis deserves a trial, even if it does not cure always, and only relieves."

——*Lippincott's Magazine* for October has a very interesting table of contents. In the opening illustrated article, "Norfolk, Old and New," Charles Burr Todd tells how this city, "evidently intended by nature for a great commercial centre," is at last beginning to profit by the advantages of its position. "My Escape from the Floods," by Annie Porter, gives a vivid description of an overflow of the Mississippi river. "Bark Canoeing in Canada," an illustrated paper by "Kanuck," and "Camping on the Lower Wabash," by M. H. Catherwood, are sufficiently described by their titles. "My College Chums," by Henry A. Beers, is written with quiet humor. There are some very good things in the "Monthly Gossip," and the whole number is eminently readable, and among the best of the year.

——Dr. C. L. Dana read a paper before the New York County Medical Society, in 1881, in which he claimed that syphilis is a benign disease. Dr. L. Duncan Bulkley now comes out in an article (reprint from *Transactions of the New York State Medical Society*, 1882) advocating a directly divergent view, and basing his conclusions upon the analysis of 450 cases occurring in private and hospital practice. He sums up his conclusions in six paragraphs, one of which would seem to convey the true and rational position of syphilis.

"3. In a certain proportion of cases constitutional syphilis is a mild affection, even as the infectious diseases occur with varying severity under different conditions."

It is true that we know comparatively little of the minute history or phenomena of syphilis, but every general practitioner has surely seen cases in which the disease has been malignant, and again others in which it could readily be termed benign. The same pathological laws must govern syphilitic as well as other diseased conditions.

——The solution of the exudation in membranous laryngitis has always been considered a desideratum, but how to successfully do so has remained in many cases a mystery. Dr. Eugene F. Cordell, of Baltimore, has written a paper on the subject, in the *Maryland Medical Journal*, in which he advocates the erection of a sort of tent over the bed. Inside of it a pot of water is set to boiling, into which, every few minutes, a lump of lime is thrown. In one case (a very grave one) this procedure was kept up for five days, with recovery as a result. The point he makes is the desirability of the *continuous* use of the agent. He sums up his conclusions as follows:

1. It is simple, safe, economical and universally applicable.

2. It secures the most efficient form in which the application of lime can be made, and is that most nearly approaching the artificial solution outside the body.

3. It secures the *continuous* use of an agent, generally recommended intermittently and whose utility is unquestionable, and it is the only method that will do this.

4. It secures at the same time, and without extra trouble, the advantages of an atmosphere saturated with steam.

——The question of the efficacy of "*Non-restraint in the Treatment of the Insane*," is a very important one, from a humane standpoint. The idea of restraining human beings of their liberty, as though they were wild beasts, is repugnant to the dictates of humanity. Therefore, a reprint from the *Archives of Medicine*, of an article by Dr. J. C. Shaw, Medical Superintendent of King's County Lunatic Asylum, New York, entitled "A Second Year's Experience with Non-restraint in the Treatment of the Insane," is a very valuable contribution to the literature of insanity. For some years "non-restraint" has been the rule in many of the asylums of Europe; and those who advocate its impracticability will find their arguments forcibly refuted in Dr. Shaw's article. In the King's County Asylum seclusion is rarely used, and restraint almost never, while the results have been entirely satisfactory. One of the most important points in carrying out the system of non-restraint is to find occupation for the patients. This aids very much in keeping them quiet and more contented, tends to turn their

attention to a more normal train of thought, and in some cases prevents the rapid approach of complete dementia.

——Dr. L. Duncan Bulkley, of New York, who has an extensive and well deserved reputation as a dermatologist, presented to the last International Medical Congress a plan for reform ing the present confusing and unintelligible nomenclature and classification of diseases of the skin. A committee of five from various parts of the world was appointed to consider and report upon his plan to the next International Congress, in 1884. To illustrate the necessity for this reformation, it may be mentioned that there are no less than one hundred and twenty Latin names associated with eczema by different authors. The proposed classification is based upon that of Hebra, and to those who have any leaning towards dermatology will make interesting reading. If adopted it will tend to make this hitherto obscure branch of medicine intelligible and interesting to the general practitioner. It comes to us as a reprint from the *Archives of Dermatology*.

——Anything that contributes to our knowledge of "Bright's Disease" is particularly welcome, and possesses an unusual value to the profession. This insidious enemy of health is, par excellence, a disease due to neglect of hygiene, and as one would suppose, is to be controlled more by observance of sanitary laws than by any drugs now in use. Its diagnosis is remarkably obscure, more so in many cases than that of any other known disease, its symptoms being so varied that no approach even to general rules can be laid down for its recognition. It was supposed at one time that albuminuria was proof almost of the existence of this disease, but we now know that albumen can be found in the urine when no disease of the kidneys exists. Sir Henry Thompson, prominent among many others, has noted that violent cystitis or urethritis will produce albuminuria. Dr. T. A. McBride, of New York, read a paper before the New York Academy of Medicine, on "The Early Diagnosis of Chronic Bright's Disease," which is thoroughly deserving of perusal by all. After pointing out the fact that neither albuminuria nor the presence of casts are proof positive of the disease, he contends that "increased arterial tension" is to-day regarded as one of the most constant and valuable symptoms of Bright's Disease. While no doubt it is a frequent accompaniment or consequence of the disease, yet we fear he places rather too much stress upon it. On the whole, his paper is a most excellent one, and we wish we could afford more space to discuss its many merits.

BOOK NOTICES.

The Physician Himself, and What He Should Add to His Scientific Acquirements. By D. W. Cathell, M.D., etc. Second Edition. Cushings & Bailey, Baltimore, Md. 1 vol., pp. 207.

The education of a physician is not finished when he is prepared to contend against disease with knowledge and skill. Often the hardest task yet remains to him to learn, to wit, how to act toward the public and toward his colleagues, so that he may be successful as well as skillful, honored and prosperous as well as learned. For the want of this knowledge many a young professional man has been left behind in the race, and has taken a lower rank than his abilities deserved, or has left the profession in disappointment and disgust.

Neither text-books nor lectures supply this knowledge. If acquired at all, it is usually by hard knocks and painful experiences. Dr. Cathell has, therefore, addressed himself to a worthy task in endeavoring to equip the young physician for the battle of life with this indispensable outfit. He has done his work conscientiously and with a keen insight into the difficulties and exigencies which constantly arise in professional life. In some passages we would question his taste, in others the wisdom of his advice, but these are few compared to the great number wherein he evinces sagacity and discernment. We wish every graduate would read the book and ponder well its contents.

Nitro-glycerine as a Remedy in Angina Pectoris. By William Murrell, M.D., etc., Detroit: George S. Davis. 1882. Cloth, 12mo, pp. 78.

This is an interesting monograph on this powerful agent. Its beneficial effects in angina pectoris are illustrated by a number of striking cases. The relief is positive and immediate, but the use of the drug is, in some persons, followed by headache. An instance is given where even handling a small quantity brought on this unpleasant result. The author discusses its safety as a medicine, the best form in which to give it, the accessory treatment, and other points of interest.

Clinical Lectures on Diseases of the Urinary Organs. By Sir Henry Thompson. 6th London edition. Phila.: P. Blakiston, Son & Co., 1882. pp. 175. Price, paper, 75 cents.

These lectures are so well known and widely appreciated by physicians that they do not require any special notice at our hands. They are here put forward in a cheap edition, in clear type, with fairly good illustrations, and should be in every library which does not already possess them.

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THE USE OF TOBACCO BY BOYS.

The use of tobacco by growing boys is so generally recognized as pernicious, that it is extraordinary that more energetic measures are not urged upon those having the care of youth to prevent the habit. Already it has been prohibited in the U. S. Naval Academy, at Annapolis, in the U. S. Military Academy, at West Point, in the Phillips Exeter Academy, New Hampshire, and in various other enlightened educational institutions.

This was not the result of prejudice or hobbyism. If any set of men are free from these vices of learning, it is the naval surgeons, and it was especially from them, and particularly from Dr. A. L. Gihon, U. S. N., that this attack on the weed began. The indictment laid against it charged:—

1. That it leads to impaired nutrition of the nerve centres.

2. That it is a fertile cause of neuralgia, vertigo and indigestion.

3. That it irritates the mouth and throat, and thus destroys the purity of the voice.

4. That, by excitation of the optic nerve, it produces amaurosis and other defects of vision.

5. That it causes a tremulous hand and an intermittent pulse.

6. That one of its conspicuous effects is to develop irritability of the heart.

7. That it retards the cell change on which the development of the adolescent depends.

This is a formidable bill of particulars, and yet each of these charges is preferred by the best modern authority, and what is more, each is substantiated by an abundance of clinical evidence.

Testimony is also adduced from the class records of schools and colleges, which indicate very positively that the effect of tobacco on the mental faculties is deteriorating. The best scholars are not tobacco users; non-smokers take the highest rank in every grade; and whether we look at the exceptionally brilliant students, or compare the average of those who use and those who refrain from tobacco, the result shows the same.

With these facts staring us in the face, it becomes the duty of every schoolmaster and every parent to set himself resolutely against the beginning of this injurious indulgence.

It is, indeed, no easy matter to prohibit it successfully. There is a curious attraction about this nauseous plant, which has never been explained. A habitual consumer of it cannot explain its fascination. It has extended over the world with marvelous facility.

Nevertheless, we believe that the youth of America are intelligent and ambitious enough, in the aggregate, to be trusted. If the consequences of tobacco using are plainly stated by an authority that a lad respects, it will often lead him to drop the habit, or to refrain from beginning it, when threats and punishments would not. The latter he regards as an exercise of arbitrary power, the former appeals to his reason and good sense. It is the duty of a physician to express himself plainly on this subject, and he can only do so by condemning the habit in boys, at any rate.

DRAINAGE OF SEASIDE RESORTS.

So much attention has been directed to this question during the past summer, that it has assumed very large proportions, and constitutes, today, one of the greatest problems in sanitation.

Fundamentally, good drainage at the seashore is very difficult to procure; since one of its most essential requisites is a fall or decline in the land, so that gravity may aid the water supply in carrying off refuse.

At the majority of our seaside resorts the land is very flat, hence this great requisite is wanting.

Again, it is very essential that the sewer outlets should be so located that they can freely discharge their contents at any and all times.

Neither does this condition obtain, for in the majority of instances the sewers empty into creeks or waterways under the tidal influence, so that for a certain number of hours out of every twenty-four the water is rapidly backing up into them, thus not only preventing the escape, but actually blocking up the waste in the sewers.

To obviate this objection it has been proposed, at one of our summer resorts, to place floodgates at the mouth of the main sewer. But this would be no improvement, since these gates would act precisely as the tides, and would only serve to imprison the sewage during high water.

Again, the majority of our seaside municipalities are not overly blessed with worldly wealth, in consequence of which they are compelled to do what they do with as little expenditure of money as possible. Hence their sewers are very short, and discharge their contents, we fear, dangerously near the people. Now, at low tide, this matter, this refuse, lies exposed, upon the meadows, to the decomposing influences of sun and water. The bacilli of disease, about which we now hear so much, are generated or are charged with poison (whichever it may be), and when the wind blows from that direction, are wafted over the city, to poison the inhabitants thereof.

Drainage is a difficult problem, at the best, but when we take into consideration the two factors of want of influence of gravity and tidal effects, we have indeed a nut hard to crack. When to these two is added limited pecuniary ability, the case seems, indeed, almost hopeless.

The famous English watering place, Brighton, was recently arraigned by the London *Lancet*, on account of its drainage.

A careful examination by a sanitary expert developed the facts that an intercepting sewer of sufficient size for all refuse drained the other sewers into the sea; but when the tide was in, the water flowed into the open mouth of this sewer: in addition to which, a greater trouble was discovered, in the fact that the rain water was drained into this sewer.

Therefore, whenever a heavy rainfall occurred, during high tide, this sewer was completely filled with water, so that any gas which had accumulated therein was displaced and forced backward toward the dwellings, with a power that, to a certain extent, defied the intervention of traps, since this was the only outlet for the gases, that must escape. At first the corporation of Brighton refused to admit the truth of this report, but they finally appropriated several thousands of dollars to meet the defect, by providing efficient ventilation of the sewers.

This, no doubt, will make an improvement, but it cannot, we feel, radically cure the trouble.

When we remember that these bacilli are so very minute that six hundred and thirty-three million can be accommodated in a space the size of a head of a pin, and that they are so prolific that the progeny of one single parent would, in less than three days time, fill the oceans of the world, we must conclude that it is a very likely thing for some of these wonderfully active little bodies to escape the sanitary precautions of ventilators and traps, and obtrude their unwelcome presence into the homes of the residents.

We could cite numerous reports from various seaside resorts, during the past summer, to verify the statement that the whole system of seaside drainage is defective. It is true that the same statement will apply to many large cities, but in an especial manner is it applicable to the system of drainage suffering from such defects as we have pointed out.

The remedy is a great question, one upon which much intelligent thought must be expended.

There are, however, two grand, incontrovertible elements of improvement upon which we will touch.

1st. Removal of all excrement to a great distance from the settlements.

2d. Destruction of all disease germs that decomposition may generate.

The first can only be accomplished on level ground by the aid of pneumatic drainage, such as is now being experimented with in Paris.

The second must be attained by the universal use of such disinfectants as are capable of destroying the disease-carrying products of decomposition.

One way to accomplish this last indication is by means of a separate system of water supply to closets, which shall be furnished from reservoirs containing a *disinfecting solution*, so that each flushing of the closet may carry destruction to the disease power of these germs.

Such a system would be expensive, but so would the first, and we must remember that *health* is an expensive luxury to those who would surround themselves with all the comforts, conveniences and dangers of our modern civilization.

A whole volume could be written on this subject, but we desire merely to turn thought in this direction.

BOOK REVIEWS.

We once heard a very prominent publisher ask an editor whether he ever read books before reviewing them, and when answered in the affirmative, he expressed surprise.

That the publisher was correct and the editor verdant, is, unfortunately, all too true, and this to-be-regretted fact is prejudicial to both author and publisher, as well as really injurious and unjust to the purchaser.

Books are sent to journals for review, by publishers, in order that the fact may be made generally known that such a book has been written and is for sale.

Book reviews are read by intending purchasers, in order that they may be guided in their selection by the experience and mature judgment of an editor in whom they place confidence.

If books are reviewed without being read, one of two mistakes is apt frequently to occur.

1st. They will be unjustly condemned, or 2d, they will be praised more than their merits deserve. The truth of this statement is obvious. That many editors do so review books is a foregone conclusion, from the very style of the reviews.

That they do so thoughtlessly, to save themselves trouble, we firmly believe, and we are equally confident that they do not realize the injustice they are doing authors and readers by this negligence. The Review Department of a journal (of medical journals in particular) is a very important one, and cannot be slighted.

Of course, it is impossible for all journals to devote very much space to this subject, as some can, but all editors can at least make themselves familiar with the contents of books received, and divesting themselves of all prejudice, fairly and justly state the merits and demerits of the particular book under consideration.

If they do not do so, they should then confine themselves to the bare statement that such and such a book has been received; by which they will give the desired publicity to the publication, and leave the mind of the reader unprejudiced, to look elsewhere for a discussion of its merits.

QUERY—TOUTS OR EXAMINERS.

Under this title a prominent English Journal says:—

"The Medical and Surgical Reporter says that, 'in order to facilitate the admission of students and to aid the upward tendency of medical education,' the authorities of the University of Pennsylvania have appointed physicians, graduates of that school, in the different prominent cities, remote from Philadelphia, whose duty it shall be to examine candidates for admission into the Medical Department. By this means the applicant is spared the expenditure of time and money necessary to a trip to this city on an uncertainty. Truly considerate towards the students ! ! ! "

The word *Touts* is rather new to us, but we infer, from the tenor of another article in the

same journal, that it has reference to a means of soliciting patronage. We did not investigate the inner purposes of the University of Pennsylvania in making what seemed to us a great stride in the upward march of medical education, any more than we would question the meaning conveyed by the editorials of any well established and respectable medical journal. It would be folly for us or any other journal to dilate upon the standing of the University, which is so impregnable of itself as to need no defence When the authorities of such an institution see fit to take any action calculated to improve the standard of medical education, we must, perforce, as reasonable men, believe it to be honestly conceived and intended, until we have ample proof to the contrary. Such insinuations are out of place when applied to so venerable and so renowned an institution.

Notes and Comments.

Nerve Stretching.

In the *Lancet*, Dr. Augustus H. Bampton describes a case of supra-orbital neuralgia, in which the patient had used all known remedies without any relief, until the supra-orbital branch of the frontal nerve was cut down upon and stretched with a blunt hook, just behind its entrance to the supra-orbital notch. The relief was immediate, the wound healed by first intention, and up to one month after the operation, when he was discharged, there had been no return. The pain returned at intervals during the following winter, but considering the simplicity of the operation, the author considers that it should always be resorted to when other treatment fails, in this painful affection.

Intussusception in Infants.

Dr. W. R. Gillette, in the New York *Medical Journal*, states that he has succeeded in reducing three cases of intussusception in infants by the administration of chloroform, injections of warm water, and the application of massage to the mass felt through the abdominal walls. He knows of two other cases, where all the ordinary means failed, and reduction was effected by chloroform and massage. The children, in all these cases, were held, and the injections forced into them against all voluntary and involuntary efforts that they could make. In one case the gut had been invaginated forty hours, and in another for three days. In one case, the particulars of which are recorded, the water, after three or four bulbfuls were thrown in, was rejected. This was repeated constantly ; it seemed almost impossible to get the gut to retain any water. Finally, an assistant resorted to massage (the infant being under chloroform). Immediately there was a roar of rushing wind and water, and a large amount of water passed in and was apparently retained. The child was laid down, warm bottles put around it, to rally it after the ordeal; the bowels were moved in a short time and a rapid recovery ensued.

Lead Paralysis from Contact.

In the *Gaz. des Hôp.* we find reported the case of a young man who was suffering from paralysis of the forearm. When in the army, whether in Algiers or Senegal, he always enjoyed the best of health in localities where numbers were dying around him—always having taken care to wear double flannels in the hottest countries. On leaving the army he became a carter for the transport of merchandise, and three weeks before admission had been transporting white lead. While loading his cart, one of the barrels burst, and he employed his left hand in endeavoring to save as much of the lead as he could. The hand and forearm were thus covered with lead. The next morning the extensors of the arm were paralyzed. It was a purely local paralysis, and neither colic nor any other sign of lead poisoning was present. He was treated by electricity.

Parturition Complicated with Whooping-Cough and Pleurisy.

In the Edinburgh *Medical Journal*, Dr. Wm. J. Beatty reports the case of a woman who, being pregnant, contracted whooping-cough from her children, three weeks prior to the expected confinement. On the night before labor commenced, she was seized with pleurisy. As soon as delivery was effected, she commenced to improve, and was entirely well eleven days after confinement. The Doctor, in conclusion, says: "This case caused me much anxiety, as the complications were really very formidable, and I confess I was rather surprised to find my patient recover so rapidly. Perhaps the pleurisy was cut short by the usual "loss" after childbirth, and, if so, are we right in not bleeding our patients in inflammation of the lungs or their serous envelope? Strange, too, that she lost her whoop."

Kolpokleisis for Vesico-vaginal Fistula.

The *Medical Press and Circular* says that Dr. R. Lomer, of Leipzig, in a reprint from Langenbeck's *Archives*, Bd. xxvii, 3, reports a series of thirteen cases of urinary fistula met with in the clinic at Heidelberg Two of these cases operated on terminated unfavorably. In the first of the two, after every method of operation had been tried in vain, that of "Episioplastik" was tried. This was an attempt to close the vaginal orifice by flaps brought from the thigh. The operation was only a partial success, union not being complete. The second was a case in which there was complete absence of vesico-vaginal septum and part of the urethra. The cure in this case was attempted by kolpokleisis, after the formation of a recto-vaginal fistula upon the sphincter ani. After repeated attempts the closure of the vagina was not only not effected but the urine still dribbled away. But what was worse, fæces and wind found their way through into the vagina, so that the artificial fistula had to be closed, and the patient was finally fain to depart unrelieved.

Hysteria.

The *Medical Press and Circular* says that a young girl, aged 20, was found one night, by the police, in an insensible state, lying on one of the benches of the boulevards in Paris. She was removed to the hospital, where she lay for several days in a sort of stupor, taking no nourishment and paying no attention to anything around her. Before waking out of her lethargy she gave birth, unconsciously, as she afterwards affirmed, to a child. Pins and needles were thrust through her legs and arms, but she gave no signs of sensation. All conceivable efforts to rouse her failed. When finally she roused up, she said that she did not remember anything that had occurred, and was surprised to find herself in the hospital, as she was alone in Paris, her parents residing in the country. The daily papers were much excited, and called her the "fasting girl," but the verdict will not fail to be hysteria.

Improvement on Tinctura Arnicæ, U. S. P.

Charles H. Hæntze, in the *American Journal of Pharmacy*, recommends the following as an improvement on the present way of making tincture of arnica. Take of arnica flowers 6 troyounces; alcohol 1½ pint; water ½ pint. First take the arnica flowers and rub in a mortar with 2 drachms of sodium carbonate, until quite fine, then take the powder and put in a 2 pound tin percolator of the Rosenwasser pattern, and percolate with the diluted alcohol, raising the reservoir about five feet above the percolator; the result is a quart of dark, clear and strong tincture, and as the quantity of carbonate of sodium is so small it would be hardly objectionable. This same tincture may be made by maceration, but as the latter takes up a great deal of precious time, the former way is preferable. Also the often seen precipitate does not appear in this process.

Functional Derangement of the Heart.

Dr. Zinsser, in the New York *Medical Journal*, refers to the case of a gentleman, forty-four years of age, in good health, who was suddenly attacked with distressing palpitation of the heart, without apparent cause, the pulse rising to 160 a minute. He was a moderate smoker and drinker. His urine was free from albumen at the time. Similar cases have been reported where mental excitement or worms have been the cause. Dr. Langemann considers that this condition might be induced by the introduction of strong alcoholic beverages into an empty stomach. Such a practice is occasionally indulged in by army recruits in Southern Germany, to deceive the examining physician.

Prolonged Use of Chloroform in Labor.

Dr. J. Wybrants Olpherts, in the *British Medical Journal*, relates a case of instrumental labor, in which the woman was kept completely under the influence of chloroform for over six hours, during which time the forceps were applied, craniotomy was performed, and the forceps used a second time. There was no excessive post-partum hemorrhage, no vomiting, no nervous shock. These good results he attributes largely to the use of chloroform, for he fears that ether would have a greater tendency to produce these troubles.

Influence of Light on Vision.

The *Lancet* says that M. Charpentier has been engaged in a series of researches to determine the quantity of light requisite to enable the eye to distinguish between two luminous points. He finds that with equal illumination and for the same distance the visibility of luminous points is directly proportional to their surface or to the square of their diameter. That with equal illumination and when of equal size the visibility of luminous points is inversely proportional to the square of their distance from the eye; and, thirdly, that when the luminous points are of equal dimensions, and at the same distance from

the eye, their visibility is directly proportional to their illumination. The eyes were in all the experiments exactly accommodated to the distance of the objects, and were free from astigmatism.

Acute Conjunctivitis Caused by the Electric Light.

Dr. W. C. Rockliffe records, in the *Lancet*, the case of a man who was engaged in adjusting the carbon points of a lamp of 3000 candle power, without wearing the colored glasses commonly used to protect the eyes. As an almost daily occurrence the brilliancy of the spark causes more or less paralysis of the retina, or, to quote his own words, "he rarely is able to perceive the people walking on the footpath when descending the ladder from adjusting." Although this effect soon passes off, on this particular occasion, as he regained his power of vision (in about fifteen minutes) it was followed by rapidly increasing lachrymation, photophobia, pain and swelling of the lids, the whole symptoms being developed in thirty minutes. Having suffered from many slight attacks of a similar nature, he applied cold water, which previously had relieved him; but the pain and swelling increasing, I saw him the following day, apparently having suffered intense agony during the night. The lids of both eyes were very hot, red, swollen, and brawny, and level with the superciliary ridge, the swelling extending some little distance upward over the forehead. The pain was most acute in and around the eye. On raising the lids (which was a very difficult operation, the photophobia being so exceedingly intense) a considerable amount of lachrymal fluid gushed out. The conjunctival vessels were exceedingly large, and the eyeball a brilliant scarlet; cornea clear. All these symptoms yielded to a brisk purge and lead lotion in forty-eight hours. His fellow workman was similarly affected, but to a less extent.

Asses' Milk.

The *British Medical Journal* says that Professor Parrot, after extensive experience, considers it demonstrated that asses' milk is the best substitute for the human article. He has seen it bring about the veritable resurrection of infants. In the absence of a good nurse, a milch ass is the best substitute for infants. After it, in order, come the mare, the goat, and the cow. A she ass in full milk can satisfactorily nourish three infants of the average age of five months. In places where the goat can live free, and find the food it likes, it may be substituted for the ass. Asses' milk is particularly indicated in gastro-intestinal affections.

Poisonous Bullets.

The *Medical Press and Circular* says that M. Gros, of Paris, with regard to the complaints which were made of the use of poisoned bullets, explains that the construction of the modern breech-loading arms causes the bullet to convey with it a portion of the hydrocyanic acid which the explosion of the powder has caused to be accumulated in the barrel. Even if poisoning to a mortal extent does not take place, it is remarked that the healing of wounds is materially retarded by this circumstance.

News and Miscellany.

American Gynecological Society.

The Seventh Annual Session of the American Gynecological Society was held in Boston, Mass., September 20, 21, and 22. The meeting was presided over by the President, Dr. I. Addis Emmet, of New York. The Philadelphia representatives present were, Drs. A. H. Smith and Wm. Goodell. The address of welcome was delivered by Dr. Lyman, of Boston. Dr. Taber, of Washington, D. C., read a paper on "The Proper Use of Ergot in Obstetrics;" which consisted merely of a résumé of existing knowledge on the subject. With reference to its physiological action there was an agreement that it produced in a uterus already in labor a persistent tonic contraction, which finally became tetanic in character, and that this kind of contraction was diametrically opposed to the intermittent rhythmical contractions of the normal parturient uterus. The danger of long continued pressure of the head of the child upon the soft parts of the mother was then referred to, and also the liability of producing still-births by the use of the drug to overcome uterine inertia. He did not believe in its efficacy in cases of retained portions of the membranes, and thought that the labor of their extraction was very much increased by its use. He believed that the human race would be better off without than with ergot in the management of labor; certainly it should never be given to a primipara.

A paper on "The Treatment of the Pedicle in Ovariotomy," by Dr. R. S. Sutton, of Pittsburgh (who is absent in Europe), was read by the secretary. The paper, which was largely historical, closed with a consideration of the various conditions which influence success and failure, such as climate, avoidance of the operation in public hospitals, avoidance of septic diseases by the operator and his assistants, maintenance of strict cleanliness, etc.

AFTERNOON SESSION.

"The Care of the Perineum in the Second Stage of Labor," was the title of a paper by Dr. Theophilus Parvin, of Indianapolis. Some tearing of the vulvo-vaginal orifice in primiparæ is,

according to Duncan and Schroeder, inevitable; only 39 per cent., according to Schroeder, escaping rupture of the fourchette. The statistics of many obstetricians were then given, after which the author passed to the consideration of the causes, such as those relating to the pelvis, condition of the soft parts, etc. In order to reduce the accident to the minimum, or prevent it, it was the duty of the accoucheur to hinder the abrupt expulsion of the head of the fœtus, and permit gradual dilatation of the passages which it traverses. The various methods recommended for accomplishing this were then considered. When rupture was otherwise inevitable, it had been proposed to prevent the accident, by incision or incisions, but episiotomy should not be resorted to unless it was indispensable. Dr. Parvin advocated immediate closure of the rupture, should it occur, and the use of horse-hair sutures, which certainly were readily obtained, and probably were quite as good as any other material that could be used.

The next paper was read by Dr. Fordyce Barker, of New York, on "Leucorrhœa: Its Constitutional Causes and Therapeutics." It seemed to the author of the paper that the fact that leucorrhœa was not a distinct disease, but a symptom of many different and even opposite pathological conditions, had led to a neglect of its study, and practically to a forgetfulness of the fact that it not rarely originates from constitutional causes, and that when long continued it becomes itself a cause of local and important pathological changes. No writer during the last quarter of a century had considered it, except incidentally, as a symptom of some local disease, with the exception of Comty Stoltz and Robert Barnes, who had called attention to some of its constitutional causes. This was equally true of American, English, French, and German gynecologists.

For many years he was an entire disbeliever in the opinion of Tyler Smith, that leucorrhœa was in many cases the primary cause of morbid states of the os and cervix, and while now he was not at all disposed to accept the statement that this is the fact in the majority of cases, in the few last years he had been convinced that it was true in some. While all accept the statement that local and constitutional causes continue to develop leucorrhœa, yet he thought it might be questioned whether the latter be not too often disregarded in the present day, both in the diagnosis and treatment of this disorder.

Many of these constitutional causes, such as atmospheric changes, which induced general catarrhal affections, plethora in some, anæmia in others, all forms of defective nutrition and debility, etc., were well understood. The influence of nerve disturbance, as a consequence of defective nutrition, was, perhaps, not so generally appreciated, although most practitioners knew the fact that in some of their patients strong mental emotion was sure to bring on a troublesome leucorrhœa. Dr. Barker then considered the bearing which changes in the blood vessels of the uterus produced by pregnancy had upon this disorder.

He believes the most frequent error in the treatment of these cases is to be found in a disregard of the necessity of such remedial agents as would secure a healthy performance of all the organic functions, a neglect of the *morale*, and a routine prescription of some form of iron, which, under these circumstances, was sure to impair the appetite and produce headache.

Second Day.

The first address for the second day was by Mr. J. Knowsley Thornton, of England; the subject being "The relative value of Hysterectomy and of the complete removal of the Uterine Appendages, for the Cure of Uterine Fibroids." By "Hysterectomy," he means all cases where the uterine cavity is laid open and more or less of its walls removed with the fibroid. The conclusion reached was, that surgical aid is justifiable, even necessary, in a certain number of cases, yet there is the great mortality of between 30 and 40 per cent., after abdominal section, and a still higher rate when the uterine cavity is cut into or the supravaginal portion of the uterus removed. The operation must be considered a very formidable one. But thanks to American surgery, the brilliant conception of Blundell, in 1823, was made a recognized surgical procedure by Battey, in 1874, and from the labors of others, hysterectomy has been rendered less formidable than formerly. Statistics show that the removal of the uterine appendages is attended by less immediate danger to life than other operations for the removal of uterine fibroids. The operation must be done thoroughly, mere removal of the ovaries being useless; still less useful the removal of a portion of them.

Dr. Goodell took part in the discussion which followed the reading of this excellent paper.

The President then delivered his annual address, the subject being, "A New Method of Exploration, with the pathology and treatment of certain lesions of the female urethra." After showing the inexactitude of present means for examining the female urethra, Dr. Emmet passed to the description of the new method of exploration, which formed the basis of his address.

It was some six years since he devised the plan of making a button-hole-like opening in the female urethra, for the purpose of making a diagnosis and also for facilitating any operative procedure. In the second edition of his book he had entered into the subject at considerable length, but during the last two years he had given it very careful study. The method described he regarded as the only one within our knowledge which fulfilled every indication, was safe, simple, and within the scope of any one possessing the least degree of surgical dexterity. It was as follows: administer an anæsthetic, place the patient upon the left side, and use a moderate-sized Sim's speculum for bringing into full view the vaginal surface covering the urethral tract.

He had devised an instrument with which to make the opening into the urethra, but it had not yet been perfected to his satisfaction. It operated much on the plan of the ordinary scissors used for cutting button-holes. The operation could be readily performed by means of

tenaculum, knife, and straight-pointed scissors, with a block-tin sound, of size sufficient to place the tissues upon a moderate stretch, within the urethra. The opening should be made in the median line, forward to within one-fourth of an inch of the meatus, and backward nearly to the neck of the bladder. The neck of the bladder should never be involved in the incision. The line along the vaginal surface should be nearly one-third longer than the one through the urethral mucous membrane, and it was important that the chief difference should be at the end of the line from the neck of the bladder. If the opening was simply for exploration, it might be closed without delay, as in vesico-vaginal fistula. The advantages claimed for the method were that the whole of the canal could be fully exposed; that it was safe, and could be applied by any one possessing ordinary surgical dexterity; that, if properly performed, control over the urine will not in the slightest be impaired; that no difficulty has been experienced in closing the urethral opening afterward; and that no difference has been appreciated in the passage of the urine after the operation. It is not intended to supersede the formation of a vesico-vaginal fistula for the treatment of cystitis or removal of stone.

AFTERNOON SESSION.

"Notes on twenty-one cases of Extra-Uterine Pregnancy," by Dr. T. G. Thomas, of New York, was the first paper read. His experience from these cases caused him to formulate the following rules:—

First.—If the diagnosis be well settled before the fourth month of gestation, he would destroy the life of the fœtus by electricity, in preference to all other methods.

Second.—Should the fourth month of gestation have passed and surgical interference be called for, laparotomy, or, with the tumor low down in the pelvis, elytrotomy, should be preferred to electricity.

Third.—Should the pregnancy be abdominal, the practitioner might watch and wait until full term, and deliver by laparotomy or by elytrotomy and the forceps, or manual delivery.

Fourth.—Should the full term be passed and the fœtus be dead, wait and watch, and aid nature when she demonstrates the outlet by which she desires extrusion to be effected. If bad symptoms, under these circumstances, at any time develop, perform laparotomy, under strict antiseptic precautions.

Fifth.—Should rupture of the fœtal nest have occurred before diagnosis have been fully made, wait and see whether nature is powerful enough to overcome shock, to control hemorrhage, and further, if the patient is going to escape the dangers of peritonitis and septicæmia. If these favorable results do not occur, if hemorrhage is about to destroy the patient immediately, or if septicæmia attacks her later, laparotomy, followed by antiseptic cleansing, should be promptly adopted.

"Electricity in Extra-Uterine Pregnancy." Dr. H. J. Garrigues, of New York, followed with a paper on this subject. He claimed that experience has proved electricity to be an efficacious and safe agent to arrest extra-uterine pregnancy during the first three months, and perhaps after it has advanced into the fourth month. It seems to him probable that it may be useful at any period of fœtal life.

Third Day.

The morning session was opened with a paper on "The Influence of High-heeled French Shoes upon the Female Form, and upon the Relations of the Pelvic Organs," by Dr. Samuel C. Busey, of Washington, D. C. The paper was discussed by Drs. Barker and Thomas, of New York, who had been unable to trace any serious results, upon the pelvic organs, arising from wearing high-heeled shoes.

Dr. T. M. Drysdale, of Philadelphia, read a paper on "The Ovarian Corpuscle; its Origin and Characteristics." The author believes that the cell called "ovarian granular cell" is almost invariably found in the fluid of ovarian cysts; it is distinguished from other cells by its appearance and its behavior with acetic acid. It may be found in cysts in other parts of the body, but when found in this locality it is pathognomonic of ovarian disease. It differs from any other known granular cell found in this abdominal cavity.

This paper was prepared in answer to opposite views expressed by Dr. H. J. Garrigues, at the last meeting of the Society.

The discussion was opened by Mr. Thornton, of London, who thought there was not at present any basis to stand upon, concerning the origin of the ovarian cell, because of the very great difference of opinion, among expert observers, as to what a cell is, and how it grows. Although he had not devoted special attention to the subject for some time, he long ago reached the conclusion that the nucleus, perhaps, was the first, and not the last element; and that the cell was developed afterward. Of course that view struck at the basis of much that Dr. Drysdale had said, with regard to the origin of the cell in question. Whether it was called a cell or not, he had, long before Dr. Garrigues read his paper, concluded that it was a nucleus of a rapidly degenerating cell of the cyst membrane. With reference to the question of the action of reagents, upon which Dr. Drysdale relies so much, it seemed to him that the reaction, or rather the want of reaction, in his cell, was in favor of the view that it is a degenerating cell, and not, as he (Dr. Drysdale) seemed to think, an immature cell; because in immature, rapidly growing cell substances, protoplasms of embryonic character, there existed a special proneness to take on the action of staining and other agents. Concerning the question of diagnosis, he had some time ago reached the conclusion that the cell had no practical value—at least for himself.

Dr. Engelmann, of St. Louis, thought that the ovarian corpuscle was not unlike the syphilitic corpuscle in practical value and destination.

The discussion was closed by Dr. Drysdale, who said that he had quoted from the latest observations made by Carpenter, Max Schultze, and others, as to what constitutes a cell. As to regarding the body as a nucleus, he would have done so twenty years ago, but continued study had convinced him that it was a cell—an aborted,

epithelial cell. The fact that other gentlemen had not seen it, was no fault of his; and he himself had made serious mistakes concerning it, when he had not given fluids a sufficiently careful examination.

AFTERNOON SESSION.

"The Mechanical Therapeutics of Versions and Flexions of the Uterus," was the title of a paper by Dr. E. Van de Warker, of Syracuse.

Do pessaries accomplish what they are designed for? was the question Dr. Van de Warker asked, and its consideration from a purely mechanical standpoint constituted the basis of his paper. His opinion was that the uncertainty in the results obtained by the use of pessaries came (1) from expecting too much of the instrument, and (2) from selecting an imperfect agent for want of more clear ideas of the absolute limitations imposed upon the action of pessaries, and which must govern the mechanical results to be expected. Two things must be clearly defined: 1, the limits imposed by the uterus and its appendages upon the mechanical agencies acting upon it, and, 2, the action of the mechanical forces under these limitations. These limits, both in their mechanical and uterine relations, were fixed and absolute, and were not to be evaded by skill or ingenuity, and ought to be clearly understood. One was, however, reluctantly forced to conclude that the majority of pessaries were invented either in ignorance or defiance of these limits, and as if the only restriction upon their action was that of gravity.

The paper was illustrated by tracings made with the mercurial manometer, showing the movements of the uterus in respiration, forced respiration, coughing, speaking, walking, etc., and was also illustrated with wood-cuts.

The retiring President then made a few appropriate remarks, after which he introduced the President-elect, Dr. Gilman Kimball, of Lowell, Mass., who thanked the Society for the unexpected honor it had so generously conferred upon him.

After votes of thanks to the retiring officers, and to the gentlemen who had so cordially entertained the members and invited guests, the Society was declared adjourned, to meet in Philadelphia on the third Tuesday in September, 1883.

The following officers were elected for the ensuing year: *President*—Dr. Gillman Kimball, of Lowell, Mass. *Vice Presidents*—Dr. A. H. Smith, of Philadelphia, and Dr. Theophilus Parvin, of Indianapolis. *Council*—Drs. Byrne, of Brooklyn; Howard, of Baltimore; Jackson, of Chicago, and Campbell, of Augusta, Ga. *Secretary*—Dr. Frank P. Foster, of New York. *Treasurer*—Dr. Paul F. Mundé, of New York. *Active Members*—Dr. Matthew D. Mann, of Buffalo, N. Y., and Dr. W. H. Baker, of Boston. *Honorary Members*—Mr. Lawson Tait and Mr. J. Knowsley Thornton, of England.

The following papers were read by title: "A New Operation for Ruptured Perineum," by Dr. J. C. Warren, of Boston; "Measurements of the Uterine Cavity in Childbed," by Dr. W. L. Richardson, of Boston.

Canada Medical Association.

The fifteenth annual meeting of the Canada Medical Association was held in Toronto, Sept. 6th, 7th, and 8th; Dr. Fenwick presided. Dr. Graham, of Toronto, read the Address on Medicine. He considered that, from a medical point of view, the two most remarkable events of the past year were the "International Medical Congress," and Koch's experiments on Tubercle Bacilli. He strongly supports Koch's views.

Dr. W. B. Carpenter, the great English Physiologist, was elected an honorary member, and delivered an address on "Vital Statistics."

In the Medical Section, Dr. Osler, of Montreal, read a paper, "Echinococcus Disease in America." The disease seems to be uncommon in America. He could only find reported 9 cases in Canada, and 52 in the United States. It is very common in Iceland, where fully one-sixth of the dogs suffer from it. The ova are introduced into the system, chiefly by means of drinking water which has become contaminated with the excreta of dogs suffering from the disease. The treatment adopted in Iceland and Australia is either tapping or incision. Sometimes the disease is cured spontaneously, either by the bursting of the cyst and discharge of its contents through the bowels or lungs, or by the hardening of the walls of the cyst and the consequent death of its inhabitants.

In the evening Dr. Fenwick read an address, sketching the history of the Canada Medical Association.

Dr. Cameron read a paper on "Axis traction," in which he strongly recommended the use of the axis-traction forceps of Tarnier, which combine the advantages of the straight and double-curved forceps, without their disadvantages. The instrument is powerful and gives a firm grasp to the head, while the axis of the traction handle corresponds with the axis of the blades, so that the line of traction can always be in the line of pelvic axis, without pressing back or injuring the perineum.

Dr. Alloway read a paper on the "Treatment of Abortion." He considers the tampon inefficient. ergot injurious, the finger insufficient, and the placental forceps dangerous. To prevent septic poisoning, he always used a uterine scoop, of his own invention, which he exhibited.

Dr. Rodger, Montreal, said that while he disapproved of undue multiplicity and complication of instruments, he felt that the valuable assistance rendered by them should not be overlooked. He did not approve of the placental scoop which had been exhibited, and considered it dangerous and altogether unnecessary. He spoke in favor of the tampon and placental forceps in the treatment of abortion, and held that improper application of the tampon accounted for its frequent failure.

In the Surgical Section,

Dr. Roddick, Montreal, exhibited a patient who had suffered for many months from a very painful spasmodic contraction of the muscles of one side of the neck. The man was obliged to hold his head between his hands constantly. Dr. Roddick divided the muscles, but with only temporary effect; he then applied the actual cautery frequently to the back of the neck, with most sat-

isfactory result, as the man is now perfectly well.

Dr. Major, Montreal, read a paper on "Rest and Tracheotomy." He urged the importance of rest in all cases of disease of the larynx and throat, and condemned the use of gargles. He called attention to some points in the early diagnosis of laryngeal cancer, heretofore unnoticed, and suggested the use of gold instead of silver or any other metal or material for the tubes. As far as he knew, he was the first to recommend its use.

THURSDAY, SEPT. 7TH.

Dr. Shepherd, Montreal, read the Address on Surgery. After sketching recent progress, he took up the question of club-foot, and discussed the advisability of the early division of the tendo-achillis. Personally, he believes that this tendon should be spared until it had been found that the division of the other tendons was not sufficient to effect a reduction of the deformity.

Dr. Roddick, of Montreal, has not been favorably impressed with dry dressings. He has found moist antiseptic dressings superior to the dry in major operations, where drainage is necessary. He also believes in dividing the tendo-achillis at once, and rarely finds it necessary to divide any of the other tendons.

Dr. Workman, of Toronto, referred to a reported case of the successful use of whisky dressing.

Dr. Ferguson, Toronto, made a statement as to the strength of spray used by Dr. Keith in his later ovariotomies. He had employed a spray of 1 to 30, or even stronger, instead of 1 to 60 as recommended by Lister for cases of ovariotomy. Had he adhered to the weaker spray he would probably not have had evil results from it.

Dr. Stewart, Brucefield, mentioned that a well-known surgeon was obliged to give up the use of spray, on account of its invariably causing him to suffer from hæmaturia.

Dr. Tye, Thamesville, read the report on "Therapeutics." He referred to the dangers of hasty generalizations in therapeutics as well as surgery. The power of medicine is to increase or diminish the functions of tissues or organs, not to change the character of those functions. He dwelt on the use of electricity in anæsthesia, asthenia and suppressed menstruation, and described the effects of the different currents, the magneto-electric, galvanic and frictional, in the treatment of different diseases. The therapeutical effects of some newly-introduced drugs were considered, nitro-glycerine among others. He remarked that, although a large number of new pharmaceutical preparations had been introduced, it was questionable whether some of them were not more advantageous to the manufacturer than the patient.

Dr. Harrison, of Seekirk, read a paper on "A Peculiar Form of Fever," which was sometimes remittent, subsiding occasionally for a few days, and then commencing again. Quinine had no effect, neither did any other form of treatment. Dr. Riddell, of Toronto, thought this was a kind of malarial fever, peculiar to Canada, partaking of the characters of cerebro-spinal meningitis.

Dr. Stewart Brucefield read a paper on "Three Cases of Sciatica and One of Painful Stump, Treated by Stretching the Sciatic Nerve." In some cases, where the operation proved fatal, death was distinctly attributable to the use of chloroform. Ether should always be administered in these cases instead of chloroform. The statistics of the operation are very favorable; 97 per cent. of all cases so treated are either entirely cured or else greatly relieved.

Dr. Prevost, Ottawa, read a paper on "Tumor of Bones of Skull Pressing on Brain." There was an aperture in the frontal bone. The skin covering the tumor was of normal color. The patient's intellect did not appear to be much affected, but he seemed drowsy and dull. He walked slowly, and his memory was impaired. After entering hospital he gradually fell into a state of indifference, which was followed by coma and death. The autopsy showed that the tumor originated in the bone. He exhibited the specimen.

Dr. Cameron, Toronto, exhibited a boy who was being treated for pseudo-hypertrophic muscular paralysis. The treatment consisted of cod-liver oil, syr. fer. iodid., arsenic and galvanism. The boy showed the peculiarity of his movements in going up stairs, and in rising off his back.

Dr. H. P. Wright, Ottawa, read a paper on "Phantom Pregnancy." In the case reported the tumor was situated on the left side, and developed in such a way as to produce in the mind of the patient the idea of pregnancy. The movements of the tumor closely resembled those of a living fœtus in utero. Chloroform was administered and the tumor disappeared, and the patient is now quite well, able to attend to her ordinary duties. Such cases are found chiefly among women subject to undue exertion, spinal irritability and menstrual irregularities.

Dr. Ellis described the chemical composition of milk of cows fed on distillery refuse. He had made an analysis of the milk of cows fed on different kinds of food. The mean of the solids in the milk of distillery cows he had found to be 14.64; of other cows 12.82. The amount of fat in distillery cows' milk is greater than in others, the minimum of the former being equal to the average of the latter. The caseine, sugar and ash ingredients are much the same in both. The principal difference is in the greater amount of fat in the milk of distillery cows. The distillery refuse, on examination, was found to consist of grain with the saccharine matter removed. The fat and albumen remained, together with a small quantity of alcohol, as small as distillers can make it. He could not say whether this food produced any morbid condition in the cows.

In the Surgical Section, Dr. Fulton, Toronto, read a paper on "Polypoid Fibroma of the Bladder in a Child." He says that cystotomy is the only rational method of treating these growths, though a small double-eyed catheter might be used in the case of small growths.

Dr. Ferguson, Toronto, reported three cases of eczema successfully treated with *viola tricolor* internally, and quinine baths locally.

Dr. Goodwillie, of New York, in the course of a paper on "A New Operation for Closure of Harelip and the Hard Palate, immediately after Birth," said that he operated immediately

at birth, and closed the cleft of the hard palate by forcing together the side bones of the mouth, saving all the hard and soft tissues, thus restoring the natural appearance. The nose, which is turned to one side, is straightened and the hare-lip closed. When the operation is completed, the external appearance of the nose, lip and mouth is natural.

Dr. Fenwick, of Montreal, in a paper on "Excision of the Knee," stated that out of 26 cases, 22 recovered with useful limbs, and in only two cases was subsequent amputation necessary.

SEPTEMBER 8TH.

The last day's session was occupied with the discussion of sanitary matters.

ELECTION OF OFFICERS.

The nominating Committe brought in a report recommending the election of the following officers for the ensuing year:—

President—Dr. Mullen, Hamilton.

Vice-Presidents: for Ontario, Dr. Tye, Chatham; for Quebec, Dr. Gibson, Cowansville; for New Brunswick, Dr. Atherton, Fredericton; for Nova Scotia, Dr. Jennings, Halifax; for Manitoba, Dr. Kerr, Winnipeg.

General Secretary—Dr. Osler, Montreal.

Treasurer—Dr. Robillard, of Montreal.

Next place of meeting, Kingston.

Association of Medical Officers of American Institutions for Idiotic and Feeble-minded Persons.

The seventh annual session was held at the Pennsylvania Institution for Feeble minded Children, Elwyn, Penna., commencing Tuesday, October 3, 1882, at 8 P. M., and continued for three days.

The following papers were presented and discussed:—

1. The "Mathematical Idiot," by Dr. Geo. Brown, Barre, Mass.

2. "Cerebral Localization, Chiefly with Reference to Idiocy," by Dr. C. K. Mills, Philadelphia, Penna.

3. "The Practicability of Instructing Feeble-minded Children in the Various Industries," by Dr. John A. Stewart, Frankfort, Ky.

4. "The Relation of the State to its Charities," by Dr. H. M. Greene, Lawrence, Kan.

5. "Account of a Visit to the Four English Asylums—Earlswood, Darenth, Normans-fels, Lancaster," by Mrs. C. W. Brown, Barre, Mass.

6. "The Organization and Methods of Institutions for Idiots," etc., by Dr. H. B. Wilbur, Syracuse, N. Y.

7. "The Medical Treatment of Idiots and Imbeciles," by Dr. Wm. B. Fish, Elwyn, Pa.

8. "A Few Points in Embryology," with photo-micrograph illustrations, by Prof. W. Hailes, Jr., Albany, N. Y.

The following reports were also made:—

"The Protection of Institutions against Accidental Fire," by Dr. C. S. Wilbur.

"On Bibliography of Idiocy," etc., Dr. H. B. Wilbur, chairman.

"On Statistical Records," Dr. G. A. Doren, chairman.

"On Causation of Idiocy," etc. Superintendents reporting illustrations from cases received into institution for past year.

"Clinical or Historical Reports of Special Cases."

The meeting passed off with great satisfaction to the members present. On the opening evening a reception was tendered the Association, by the board of Directors of the Pennsylvania Institution, which was largely attended, and the guests were hospitably entertained by the superintendent, Dr. Isaac N. Kerlin. An inspection of the Institution impressed all present with its admirable management and the excellent results obtained by the system of education there employed.

Saratoga Waters.

The extraordinary richness of Saratoga and its vicinity in natural mineral waters, is an interesting geological fact and an important one medically. The variety is so great that some one can be found of use in almost any chronic diseased condition. What is singular, exploration reveals waters of constantly diversified character. One of the most efficient of all, the Hathorn spring, was discovered as late as 1868. It is a saline, alkaline water, of very positive therapeutic action, something like the old Congress water, but more efficient. It is believed to contain some lithia, and the reports of its action by medical observers entitle it to rank high among our native medicinal beverages.

Peculiarities of Disease in Egypt.

The *Lancet*, in commenting upon the peculiarities of diseases noticed in Egypt by Baron Larrey during Napoleon's campaigns, 1798–1801, says: Another interesting observation of Larrey's is the occurrence of atrophy of the testicles in many of the soldiers of the army of Egypt, in the year 1799, who noticed, after their return to France, a gradual, painless wasting of these glands, accompanied, when both glands were involved, by the loss of all sexual desire and power. This occurred quite apart from any previous venereal disease. In most cases only one testicle was affected. This atrophy was accompanied by other signs of disease—wasting and debility of the lower limbs, failure of digestive power, discoloration of the face, thinning of the beard, and intellectual derangement. Larrey attributes the atrophy to the effects of great heat combined with fatigue and privations, and especially to the use of eau de vie, prepared from dates, to which the fruits of Solanaceæ were added. When the atrophy was only commencing it might be prevented by vapor baths, dry frictions, stomachics, and good food.

In regard to syphilis, he states that he found the disease to be mild and very easily cured in Egypt, but all forms of inunction were harmful; and if patients returned to France with the disease still uncured it became very intractable.

He observed, with interest, that although dogs abounded in the Egyptian cities, there was no hydrophobia among them. Camels, however, suffered from a form of madness during the time of

rut, and bites from them in this state were dangerous, but the disease was not contagious. The symptoms were the escape of an abundant thick saliva, constant bellowing, horror of water, wasting, fever, falling of the hair, and bad temper, which showed itself by their pursuing men and other animals. If excited, the symptoms increased, and often ended fatally. Horses were subject to ophthalmia, like the men, but this could be prevented by shutting up the stables during the cold, damp nights.

Naval Museum of Hygiene.

The Bureau of Medicine and Surgery, United States Navy, is about to establish a naval Museum of Hygiene. The plan proposed comprehends a collection that shall be illustrative of the entire range of sanitary science, the establishment of a course of lectures by authoritative sanitarians from all sections of the country, and a library of sanitary science accessible, under proper restrictions and guarantees, to all who are engaged in the study of this branch of knowledge. This library already numbers many of the standard sanitary works in the English, French and German languages, and is constantly increasing. It is an admirable undertaking, and we doubt not will be heartily welcomed by both the staff and the profession at large.

Dress Reform.

We note, from the *Lancet*, that the sum of $750 is offered to the Rational Dress Society, to defray the expenses of an Exhibition of Rational Dress, to be held in London during the coming winter. A Prize of $150 will be given for the dress which best accords with the following requirements: 1. Freedom of movement. 2. Absence of pressure over any part of the body. 3. No more weight than is necessary for warmth, and both weight and warmth evenly distributed. 4. Beauty and grace combined with comfort and convenience. 5. Not departing too conspicuously from women's ordinary dress.

Lectures on Dermatology.

Dr. Bulkley will give a sixth course of lectures on diseases of the skin, in the Pathological amphitheatre of the New York Hospital, 7 West 15th street, Wednesday afternoons, from 2.30 to 3.30 o'clock, commencing Wednesday, October 11th, 1882. The course will consist of twenty-four lectures, and will be free to practitioners of medicine and medical students.

Prize Question.

The College of Physicians of this city offers the sum of Twenty-five dollars, or a gold medal, to be awarded at the first meeting in April, for the best pathological report, with or without specimens, read before April 1st, 1883, by any member of the Society who, at the time of presentation, shall hold the position of Resident in a hospital.

Items.

—Dr. Lauderer reports a case in which a woman poisoned a boy, fifteen years of age, by introducing matches into his rectum. He died in great agony the same night.

—The verdict of the coroner's jury at Tunbridge Wells, on the death of a child, was: "The child was suffocated, but there is no evidence to show that the suffocation was before or after death."

—At an inquest held by Mr. Carter, East Surrey, on a man, aged 40, who had been found dead in a loft in Newington, the jury found "That the deceased died from natural decay, caused by his own negligence."

—A physician falls into a fit while making a round of visits, and is carried into a drug store.

"Send for Dr. X——," says somebody.

"No, no, not for him," says the dying man feebly, at the mention of his rival's name; "if he brought me around it would advertise him! I prefer to die."

—Dr. Septimus Gibbon, the Medical Officer of Health for the Holborn district (England) in his recently published annual report, draws distinct attention to the loss of infantile life due to constitutional syphilis. Dr. Gibbon says that this "is a leprosy which entails far worse consequences on the public health than all other preventable diseases put together."

OBITUARY NOTICES.

DR. J. S. SMITH.

Dr. J. S. Smith died at South Solon, Ohio, Monday, August 21, aged 31 years and 6 months. Dr. Smith was born in Washington Co., Pennsylvania, Feb. 10, 1851. In 1874, he was married to Miss Hannah Connett, a young lady of highly respectable parentage. He studied at the Ohio Medical College, Cincinnati, and graduated in 1877. In a short time he removed to South Solon, Madison Co., O., where he had an extensive practice.

SURGEON GEORGE P. JAQUETTE, U. S. A.

Surgeon George P. Jaquette, United States Army, with the rank of major, died recently, in New York, of aneurism of the aorta. Surgeon Jaquette was born in New Jersey and appointed Assistant Surgeon in the army, from that State, on October 23, 1861. He was promoted to the rank of captain in the Medical Department on July 28, 1866, and to that of surgeon, with rank of major, on May 14, 1880. He had been ill nearly a year.

MARRIAGES.

HESTERLY—SCOTT.—In Shreveport, La., at the residence of the bride's father, Dr. J. J. Scott, Wednesday, September 20th, 1882, by Rev. W. C. Dunlap, Dr. F. P. Hesterly, of Fulton, Arkansas, and Miss Lena R. Scott, of Shreveport, La.

WATERWORTH—BOONE.—At the home of the bride's father, Mr. J. Boone, Salem, O., September 13th, 1882, by Rev. H. B. Fry, Dr. William Waterworth, of Brooklyn, N. Y., and Miss Mary Boone, of the former place.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

AFFECTIONS OF THE EXTERNAL OCULAR MUSCLES IN GENERAL DISEASE.

A lecture delivered at the Jefferson Medical College, Spring Course, 1882.

BY WM. S. LITTLE, A.M., M.D.

Reported by Dr. Geo. F. Souwers.

Gentlemen:—I desire in this lecture to present for your consideration the effect of general disease, as it is possible to manifest itself in the impaired action of the external ocular muscles, and exhibits itself principally by producing the symptom of diplopia, or double vision; excluding, however, the condition of convergent and divergent strabismus, due to the state of the eye itself, and involving optical defects, as a primary cause; in such cases double vision is rarely complained of.

The subject is a difficult one, but yet interesting, and of practical value in treating disease. The study of Helmholtz' Physiological Optics is conducive to mental training, irrespective of what practical value it has in helping us in medical practice.

To fully appreciate the abnormal action of the organ of vision and its addenda, it is not only necessary to know the anatomy of the tissues of the eye, but also the optical anatomy of an emmetropic pair of eyes, as they are exercised in performing the act of binocular single vision.

In the visual act it is primarily and imperatively necessary that the fovea centralis of each eye should be directed to or receive impressions from the same object in space at the same time, in order to see singly.

At the fovea centralis the rods and cones of the retina are most exposed to the action of rays of light. The curve of the cornea and the curves of the crystalline lens bend the rays of light, which are parallel before they are acted upon by these structures, so that in an emmetropic eye a burning point or focus is made at the fovea centralis; a space on the retina irregularly oblong and $\frac{1}{12\,0\,0}$ square inch in size. The location of the fovea centralis decides the position of the visual axis; elsewhere on the retina the focalization of rays of light by the dioptric system of the eye is not so effective, nor is the sense of sight so acute.

The sense of sight is most acute at the fovea centralis, as the sense of touch is at the tips of the fingers; elsewhere on the retina, sense of sight is like the sense of touch elsewhere than at the tips of the fingers; the more remote the less appreciation of the sense.

The external muscles of the two eyes must then act upon the eyeballs, suspended, as each one is, in the orbit, in such a way and with so much force as shall turn the fovea of each eye to the same point or object in space at the same moment of time, to give the mental impression of one image; if the muscles of either eye fail to do this, identical points, or rods and cones in the retina of each eye are not stimulated by pictures of identical spots or points in space, and diplopia or double vision results.

You must remember that the nasal half of the left retina is associated with the temporal half of the right retina, and the nasal half of the right retina with the temporal half of the left retina, while the superior half of each retina cor-

respond, and from the lower half of each retina act together. When these identical spots in each retina are not controlled together beyond the point which give us stereoscopic vision, or sense of depth, objects contemplated which should, under control of the muscular sense, appear as one, are recognized as two, and they assume a position either one above the other, both along side of one another, or obliquely placed, according to which muscle has failed to act properly, and their separation depends on the amount of impairment of the muscle; the muscle may be either weakened, paralyzed, or undergoing spasm. The image displaced is called the false image and corresponds to the eye affected.

The sense of two images is perceived as we can produce the sensation of two objects through the touch, by crossing our fingers on one hand in feeling one object, instead of feeling the same object with our fingers in their normal position.

Your knowledge of the anatomy and physiology of the cerebro-spinal system and the nerves distributed to the eye, as well as to all the other organs of the body, enables you to know their normal function. Your clinical observation has afforded you full opportunities to observe how pathological changes in the cerebro-spinal system, as well as nerves going to the various organs, modify the action of separate organs, and you are aware of the influence of diseased conditions in the organs themselves, and their influence on the whole system.

The possibility of impairment of the action of the external ocular muscles, in rotating each eye, by changes in the cerebro-spinal system, or nerves going to the muscles, is easily understood, and by recognizing how a person sees objects in space, you are not only able to tell what muscle of the eye is affected, and what nerve is involved, but often are able to give a more exact location of the primary cause in a lesion present in the cerebro-spinal system itself.

Prof. Ferrier, in his experiments on the cerebral hemispheres by electrical irritation, has produced disturbances not only in the movements of the eye, but nearly all parts of the body. See Chap. VIII, "Functions of the Brain."

Diplopia becomes, then, a symptom of disturbance of the action of the external ocular muscles. The retina of each eye affords visual control over a definite extent in space; in binocular single vision, the definite fields of vision for each eye overlap each other to a definite extent also, and in this space formed by the overlapping of a certain portion of the fields of each eye, single vision for both eyes at once is obtained. This binocular field is called the horopter; to the outer side of this space we see double; and yet this does not annoy us, but is rather a source of protection. For while binocular single vision controls objects in front of us, we have a monocular single field to the right side, and also one to the left, and are able thus to see objects about us to a great extent, as in the act of walking is found necessary. If the limits and extent of the space which should physiologically overlap are not constant and fixed, or under control, a displacement occurs, and diplopia or double vision is produced; an abnormal horopter exists.

You must learn, then, to map out in front of you or your patients the normal horopter, and any abnormal horopter is soon recognized by both yourself and the patient; diplopia is an objective symptom as well as a subjective one.

A normal horopter gives no diplopia, an abnormal one produces double vision, and from the relative position of the falsely projected image to the true, you draw your conclusions as to which eye, muscle, or nerve, or what portion of the cerebro-spinal system, is at fault.

As three different nerves control the six external ocular muscles of each eye, and the nerves arise in the brain on the side of the eye they control, you have in the accomplishment of binocular single vision the associated action of two sides of the brain; six nerves, twelve muscles and two eyes. The act of vision, then, is not unlike the attempt to drive a three-handed team with each hand; only, instead of one wagon to be conveyed, two are being pulled, and they must be kept in a given road without interference. The eyes are the wagons, the muscles the horses, the nerves the reins, and each side of the brain a hand; one rein controls one horse, a second rein another horse, while a third rein controls the remaining four for each side.

For a practical test, a candle held before you, or a blackboard divided into spaces by horizontal and vertical lines several inches apart, taking a vertical line on the board corresponding with the middle of the face and a horizontal line cutting the cornea at the middle; where these lines cut, is a point of fixation; holding the head still, you see where, in the different spaces on the blackboard, a piece of chalk appears single or double. A perimeter is an instrument to make the observation more exact, and affords a record to be made with minuteness. The candle to be held at several, the blackboard two or three feet

from the patient, and the perimeter at the same distance or nearer.

Double vision existing, and desiring to know which eye is at fault, by calling in another sense to help you, namely, touch, you soon clear the diagnosis. Covering each eye separately, and allowing the patient to attempt to touch an object quickly with the hand, the eye at fault prevents an accurate aim, and he misses the object. Then the rotary movement of both eyes in following the describing of a circle in front of the patient, affords a means of diagnosis by a peculiar jerking movement of the eye affected. according to which muscle is at fault. Observe the movement in a pair of healthy eyes and you will soon learn to recognize any deviation. Double images assume two positions in relation to each other, either the object for the right eye is on the right side, and that for the left eye on the left side, or the object for the right eye appears on the left side, and the object for the left eye on the right side; the former condition produces homonymous images, and the latter crossed images, or diplopia. This is readily ascertained by covering an eye quickly and see which image disappears; the right eye being covered, the right image is lost, it is homonymous; the left eye being covered, the right image is lost, it is crossed, diplopia. A red glass over one eye colors one image red, and you thus learn where it is located.

In paralysis of the external rectus of either eye, in paralysis of superior oblique and inferior oblique, the images are homonymous.

In paralysis of the internal, superior and inferior rectus, the images are crossed.

Double vision appears in different portions of the visual field, according to which muscle is affected, and the relative position of one image to the other varies in the same way, and they vary in different portions of the field.

In paralysis of the external rectus of the left eye, and internal rectus of the right eye, images are only double to the left side of a vertical line, in front of the patient; in paralysis of the right external rectus and left internal rectus they are only double to the right of this vertical median line. The images in either of the above cases are parallel in the middle of the field, and diverge at the top and bottom, in the upper and lower portion of the field.

Paralysis of the superior rectus of either eye gives double vision in the upper half of the field of vision; for the left eye objects are higher toward the left side, and obliquity increases to the right; for the right eye the reverse obtains.

Paralysis of the inferior rectus gives double vision in the lower half of the visual field; for the right eye the images more divergent to the left, and less oblique toward the right; the reverse exists for the left eye.

The superior oblique being paralyzed, the images are double in lower half of the visual field; difference in height and obliquity is most marked; for the left eye the vertical separation is greatest to the right, and obliquity to the left. Paralysis of the inferior oblique, which is rare, gives the opposite of the superior oblique. The diagrams before you illustrate all the conditions in paralysis of the various muscles when one muscle alone is affected; when more than one muscle is paralyzed the conditions are more complicated, but are readily diagnosed.

The false image appears nearer than the true one, or on a different plane from the true image.

By displacing one of your own eyes, by pressure of your finger upon the eyeball, corresponding to the location of the different muscles, you can observe all these conditions yourself; or using a prism, and placing it before the eye and looking with both, the same can be seen; the prism must be rotated before the eye, so as to have an effect upon all the muscles in turn.

By means of a prism placed before one eye, we can get an idea or rather an expression of the power of an ocular muscle.

A prism before one eye, the other also being used, gives double images; if the muscle corresponding to the position of the prism is able to unite these images, then place a prism of a greater degree and find a prism that prevents the union of these images. A prism weaker, that allows the fusion of the images, expresses the power of the muscle, just as the degree of the prism that unites images in a case when a muscle is paralyzed, gives the amount of the paralysis.

The muscles in their normal state overcome prisms, as follows:—

Internal rectus prism,	20° to 30°	base out.
External "	6° to 8°	" in.
Superior "	1°	" below.
Inferior "	1°	" above.
Sup. oblique (my case),	8°	base obliquely bel.
In. " "	5°	" above.

You should know the length of the muscles, their weight, size, point of origin, course and place of fixation on the eyeball. For a more extended description of the manner in which binocular single vision is accomplished, you should study for yourselves, in works on Diseases of the Eye, and works on Physiological Optics.

The subject deserves far more than I have presented at this time, and we must now proceed to consider the subject of diplopia being a symptom in general disease, or in what diseases we may find diplopia as one of the symptoms.

Ocular symptoms of general diseases are of the most help in making a differential diagnosis; not unfrequently they are the only symptoms of a diathesis, or symptom of disease in another organ, and their recognition at other times is more evidence added to the other already existing.

Prof. Förster, of Breslau, in "*Handbuch der Gesammten Augenheilkunde.*" Sieberter Band erste hâlfte, cap XIII, has presented the ocular symptoms in general disease and diseases of the other organs of the body, to whose classification may be added the Diseases of Old Age (Charcot). In this present course of lectures, I have been taking up each tissue of the eye, with its addendæ, and giving the conditions as exhibited by the tissue or part of the eye, as produced by the diseases occurring in each system of general medicine, and we will apply the same method in studying the affections of the external ocular muscles, as a symptom of general disease.

Clinically, you will find that diseases of the orbit are the most productive of impairment of the action of these muscles; next affections of the spine and cerebral diseases the least frequent cause of diplopia.

The muscles, as the result of the various diseases, may be simply impaired in their action, or palsied, partially or completely paralyzed, or undergo spasm.

In diseases of the circulatory and respiratory systems, extravasation of blood into the orbit from diseased conditions of the walls of the vessels, or laceration of them from blows or penetration of foreign bodies into the orbit, affect the muscles in their action.

Fractures of the walls of the orbit may allow entrance of air into the orbit, and thus have an effect upon the muscles.

The orbital cavity connects, through foramina, with all the cavities of the head.

In Basedow's disease, while diplopia rarely occurs, the eyeballs protrude, either from weakening of the muscles, or condition of the vessels, or deposit of fat in the orbit.

The orbit, should only contain so much, and any increase or decrease of its contents, irrespective of the eyeball, which, strictly speaking, is anterior to the contents of the orbit, modifies the action of the muscles in a space either encroached upon or restricted.

In diseases of the digestive system, severe constipation has been stated to produce an affection of the ocular muscles. A case is quoted where five or six times this happened to the same patient, a different muscle being affected each time.

No affections of the ocular muscles external to the eyeball are known to occur in diseases of the genito-urinary or reproductive organs of the male or female; certain portions of the eye do suffer through reflex irritation of these organs, however; masturbation and disease of the apparatus may produce asthenopic symptoms.

In diseases of the nervous system, a wide field is open to investigation, and diplopia occurs frequently, along with other more numerous symptoms of disease of the cerebro-spinal system, including the changes in the nerves going to the ocular muscles, and disease involving them in parts lying along their course to the eye.

Simple hyperæmia of the meninges of the brain or spinal cord, or nerves themselves; effusions into the arachnoid space around the nerves as well as changes in the nerve tissue itself, are sources of trouble and impair the action of the external ocular muscles. Periosteal changes also lead to pressure upon the nervous tissue, and modify the action of the muscles. In peripheral irritation following blows on the head or region of the spine, the symptom of diplopia is generally late in asserting itself. Any lesion at the base of the brain, and in and about the fourth ventricle, may give rise to diplopia. Gummata, tumors, aneurisms, tubercle, exostoses, are the most productive causes.

Small growths and lesions apparently insignificant in size, rather than gross lesions, are most likely to affect the ocular muscles or nerves going to them; statistics are as yet too small and observations not definite enough to be of great worth in this line of cases.

In tabes dorsalis, Prof. Charcot has found, in 203 cases, 30 cases presenting affections of the ocular muscles, and this symptom appeared early in the case.

In diseases of the skin, epithelioma, or malignant disease of the skin of the lids, may not only destroy the eyeball, but also the contents of the orbit may become involved; beyond this I know of no associated disease of the muscles from this system.

Rheumatism and gout being classified separately, the tendons of the ocular muscles are involved, as tendons of muscles elsewhere in the body suffer, and while diplopia does not exist, the act of rotating the eyeballs is painful, and their action is modified.

In acute and infectious diseases from changes in the nervous system diplopia occurs; typhus fever, diphtheria, scarlet fever. The condition of strabismus, so often attributed to measles and whooping cough, is to be attributed to optical defects; the convergent squint to hypermetropia, and the divergent to myopia. There are exceptions to this, however, its reverse occurring, and while the disease present may hasten the development of squint, it would have appeared later, irrespective of any disease.

In trichinosis the disease may develop in the ocular muscles, as elsewhere in the tissues of the body.

In constitutional diseases and diseases of malnutrition it is a more common symptom. Syphilis, in its varied forms of development, is the principal cause of diplopia, and gummata developing in the orbit and cranial cavity, and affecting the nervous structure itself, modify the normal action of the parts adjacent, by pressure.

Diabetes allows either a partial or complete paralysis of the ocular muscles.

After typhoid fever, malarial fever, or any cause that lowers the tone of the system, these muscles suffer with the whole body.

In old age lesions in the body that in youth might not have any effect on these muscles, allow an influence to be felt.

From the above, you see, quite a number of diseases have their effects upon the external muscular apparatus of the eye, and its presence should be recognized, not as a symptom of disease of an organ of special sense, but one belonging to general disease, and of value in helping to make a diagnosis.

A few words as to treatment: when diplopia is present, the methods of treatment for combating the disease which has produced the diplopia will relieve the diplopia, along with the other symptoms, and as it improves it becomes important as a factor in making a prognosis. To prevent accidents by misjudging the relation of objects in space and the true direction of things in front, it is better to have the eye at fault covered; so only the true image is observed. If this is not desirable, a prism before the affected eye, with its base toward the image desired to be brought into position, is advisable; as the condition improves weaken the degree of the prism, till, finally, none is necessary; or, in a case of total paralysis, to be worn constantly. Electricity is valuable. Operative procedure should only be undertaken late, not till you are confident no improvement can be attained by the other plans; and even then results by advancement of the opposite muscle merely give a cosmetic effect, and diplopia in other portions of the field may exist. If blindness co-exists with the diplopia in an eye, operative measures are not to be thought of.

Communications.

EXANTHEMATOUS NECROSIS OF THE SUPERIOR MAXILLA.

BY JOHN S. SMITH, D.D S.,
Of Lancaster, Pa.

John S., a boy, aged four years, of the sanguine lymphatic temperament, strumous diathesis, residing in the country, was brought by his mother to my office, in July, 1881, at the suggestion of Mrs. Mary A. Wilson, M.D., and Dr. John L. Atlee, Sr., consulting surgeon of Mrs. Wilson, to have the oral cavity examined. When we first saw him, he presented a pitiable sight. He limped into my presence, the left leg being about one-half inch shorter than the other, caused by an ulcer in the popliteal space. Another ulcer opened on the left side of the thorax, below the clavicle, and one on the left arm near the insertion of the deltoid muscle. The left side of the face was swollen. The body was so emaciated that little hope was entertained of his life.

History of the Case.—In the early autumn of 1880 the child had an attack of bilious remittent fever. Other members of the family were similarly afflicted, one of whom, a cousin, died. About one week after convalescence the child complained of severe pain in his left upper jaw and face, for the relief of which the usual domestic face treatment, hot poultices, was resorted to. The face soon became swollen, and suppuration ensued; an abscess formed, pointing externally. This finally opened near the infra-orbital foramen, discharging large quantities of offensive pus. Subsequently, a number of the deciduous teeth upon that side of the face loosened; these the boy removed with his fingers. Later, a large portion of the maxillary bone and process came away with the remaining deciduous teeth, together with the crowns of the undeveloped bicuspids.

The patient had received no medical treatment from the time he had the fever, in the fall of 1880, till within a month of the time he visited me, in July, 1881, when he came under medical treatment.

Diagnosis.—The foregoing history of the case is sufficient to establish the diagnosis to be ne-

crosis of the maxilla, the extent of which, however, would not be so plain without an examination of the oral cavity.

An examination revealed the parts to be inflamed. The floor of the antrum had come away with the detached sequestrum.

Fortunately, the floor of the orbit (a large portion of which is made up by a process, the orbital, which is part of the superior maxilla), the roof of the antral sinus, was not disturbed.

The left permanent incisor, and the cusp of the canine and first permanent molar, were found loosely imbedded in the stroma. A sinus could be traced with a delicate probe, from within, upward and outward, to a fistula under the rim of the orbit, through the palpebral muscle.

The lower eyelid was drawn downward and turned outward, exposing the inner aspect of the lid, causing an unsightly appearance.

There was some conjunctivitis. The lachrymal flow was profuse. The secretions kept up the irritation to the parts below the eye. The jaw had sustained no external injury. The teeth removed with the sequestrum showed two superficial cavities. The pulp was not exposed. We excluded pulpitis, pericementitis, dental and alveolar necrosis, as a definite signification of the lesion.

In accordance with the clinical history, we class the case with exanthematous necrosis, as the result of the exanthemata. It occasionally, though fortunately quite unfrequently, happens, says Prof. James E. Garretson, "that a subacute inflammation of the jaw occurs, resulting in limited, or, it may be, in extensive necrosis of the part affected." Dr. G., in his clinical and private practice, has met with quite a number of cases.

To Sir James A. Salter, of Guy's Hospital, is accorded the credit of having first directed attention to this form of disease, as far as the recognition of its associations is concerned. The child's age, being under five years, would exclude ostitis as a primary expression connected *with dentition*, whether first or second.

Local Treatment.—The patient was etherized, and the remaining sequestrum removed with the forceps, and the parts thoroughly cleansed. The undeveloped central incisor, canine and first permanent molar, held in the soft stroma, were only acting as irritants, thus keeping up the inflammatory condition of the parts; it was thought best to remove them also.

Pus was almost constantly flowing, either through the sinus under the eye, or being taken into the stomach. A suitable probe was now carried through the fistula, making better vent for the pus outwardly. The sinus was now thoroughly washed with tepid water, throwing it through with a syringe. The subsequent local treatment was stimulating and antiseptic. The parts were ordered to be cleansed frequently by syringing the sinus, thus getting away the offensive, semiputrid pus, in place of allowing it, as before, to pass into the stomach.

The following wash was ordered, to meet the requirements of the case:—

℞.	Tinctura capsici,	f℥ ss	
	Tinctura myrrhæ,	f℥ ij	
	Potassæ permang.,	℥j	
	Aquæ destillatæ,	Oj.	M.

Sig.—Syringe the parts frequently.

General Treatment.—The constitutional treatment consisted in the exhibition of the iodides; of these the iodide of potassium and the syrupus ferri iodidi were given for at least a month prior to receiving local treatment. The treatment was continued for several months after the sequestrum was removed. The patient was advised to take frequent exercise in the open air, and to be given good, nourishing food. In six months he made a good recovery, and was dismissed cured. All that remains to be accomplished in the case is a small plastic operation upon the eyelid; this will be attended to at a future time.

FOREIGN BODIES IN THE POSTERIOR SECTION OF THE GLOBE.

BY M. LANDESBERG, M.D.,
Of Philadelphia.

Cases in which a foreign body, after having penetrated the walls of the globe, has remained for years in the posterior segment of the eye, without causing inflammation and subsequent loss of vision, are of very rare occurrence. Of these instances only thirteen are recorded in the whole medical literature. This tolerance to foreign bodies in its interior, with preservation of good, respectively normal sight, has its counterpart in the tolerance of the brain to the presence of foreign bodies in its tissue, with preservation of normal mental functions. But as in the latter instance the rest may be temporary only and reaction may set in at any time, so may the normal condition of the eye in the interior of which a foreign body is imbedded be disturbed at any time by the outbreak of an inflammatory process, which may not only cause the total loss of vision in the injured eye, but may also involve the other eye in the morbid process, endangering its vision by sympathetic ophthalmia. Should such cases have the only

merit of their being so rare, they would deserve publication every time they happen. But having such an important bearing upon the practice, I need no excuse for drawing the attention of the profession to the following three cases, which have come into my notice during my practice.

CASE I.—CHIP OF STEEL IMBEDDED IN THE POSTERIOR SECTION OF THE GLOBE, WITH RETENTION OF GOOD SIGHT, DURING AN OBSERVATION OF ELEVEN YEARS.

Mechanic, C., 31 years old, presented himself, January 3d, 1870, seventeen hours after a small piece of red-hot iron had struck his right eye. Examination showed: Superficial erosion of the lower lid, near the outer commissure. Several eyelashes are scorched. The conjunctiva of the eye ball highly congested. The outer part of the sclera, embracing just the triangle which is formed by the opened lids, exceedingly chemotic; cornea normal; anterior chamber clear; iris hyperæmic; pupil contracted; upper ciliary region sensitive to the touch; tension normal. On atropia, pupil dilates but slowly, and hardly in the medium. Lens intact; optic disc slightly opaque, highly congested, and of indistinct limits. Somewhat below the lower border of the optic disc, outward from the inferior branch of the retinal vessels, there is an irregularly-shaped whitish exudation, which, rising somewhat above the level of the retina, immerges into the latter without distinct limits. In the centre of the exudation there is a foreign body of bluish lustre and of oblong shape. It is lodged in the tissue of the retina with one end, while the other point projects into the vitreous humor. The latter is of reddish hue, and shows a small, bunch-like opacity, which starts in the form of a stalk, from the locality from where the foreign body projects into the vitreous humor. Inward from the exudation there are several small ecchymoses. V = $\frac{15}{100}$, Jaeger 8. The objects appear somewhat reddish. Field of vision cannot be distinctly measured.

In spite of absolute rest in a darkened room and the appropriate treatment, the reactive symptoms were very intense, and the danger of panophthalmitis imminent. Vision decreased to counting fingers at 8′. But improvement set in from the fifth day and recovery progressed very favorably. On the eighteenth day after the injury the eyeball showed but very slight inflammation. Iris was slightly hyperæmic, pupil medium dilated and without adhesions. Vitreous humor contained only a few filiform opacities. Optic disc hyperæmic, slightly suffused, and of indistinct limits, showed on its inner border a flat extravasation. The exudation was somewhat flatter and smaller, and of gray color. It was surrounded by small masses of darkish pigment. Inward from the exudation there were several flat ecchymoses in the stage of resorption. The foreign body lay flat, embedded in the exudation, representing a darkish line of about two millimeters in length. There were some choroidal atrophies and patches of pigment in the upper outer periphery of the retina. V = $\frac{15}{50}$, Jaeger 3. Field of vision normal. No scotoma.

At the time of the discharge, in the first days of March, the condition was as follows:—

No symptoms of irritation whatever. Vitreous humor contains only a few filiform flakes. Optic disc slightly hyperæmic, of distinct limits. Instead of the exudation we observe in the retina an oblong, grayish streak, in which the foreign body lies embedded. The borders of the streaks and the adjacent parts of the retina are occupied by pigment cells. The ecchymoses have almost resorbed. V. = $\frac{15}{40}$, Jaeger 2. An irregularly shaped scotoma appears occasionally, on dazzling light, in the upper inner quadrant of the field of vision.

Examination, repeated July, 1871, after patient had borne, without the least inconvenience to his eye, all the fatigues of the German-French war, showed V. almost $\frac{15}{30}$. In the background of the eye patches of pigment and the oblong, dirty-gray streak, through which the foreign body could be seen, but on favorable illumination only, as a dark line.

I saw patient again, by chance, June, 1881, after I had lost sight of him for ten years. The eye had remained healthy all the time. V. was $\frac{20}{30}$. The dirty gray streak was totally covered by small clusters of pigment, which left no trace of the foreign body.

CASE II.—SPLINTER OF IRON IMBEDDED IN THE RETINA, BETWEEN OPTIC DISC AND MACULA-LUTEA, WITH RETENTION OF NORMAL SIGHT DURING AN OBSERVATION OF FIVE YEARS.

Mechanic, S, 35 years old, came to me June 5th, 1877, two hours after a chip of iron had struck his left eye. There was moderate subconjunctival injection, slight photophobia and lachrymation. The cornea presented, on its outer border, just on the horizontal meridian, a small penetrating wound, and opposite the latter there was, in the stroma of the blue iris, a linear dark streak of about 2 mm. in length. Anterior chamber was clear, pupil somewhat contracted. Background of the eye could not be distinctly seen. V = $\frac{15}{20}$, Jaeger 1. Field of vision normal.

Impressed with the idea that the dark streak in the stroma of the iris might indicate the place in which the foreign body had lodged, I abstained from instillations of atropia, in order to avoid any dislocation of the foreign body by the contraction of the pupil, and resorted at once to iridectomy. But no foreign body could be found in the removed piece of iris. The healing process was normal. Examination, made June 13th, after the pupil had been dilated to the utmost, showed lens perfectly clear. Some filiform flakes in the vitreous humor, and on the retina, between optic disc and macula lutea, a circumscribed, whitish exudation, through which a dark, pointed body, of oblong shape, could be distinctly seen. The outer border of the exudation, near the macula lutea, contained some small blood extravasations. There was but slight retinal hyperæmia. V. $\frac{1}{50}$. Outward from the point of fixation there was a small scotoma, of oval shape.

Under appropriate treatment the symptoms of irritation vanished rapidly, vitreous humor cleared up entirely and exudation resorbed. The place was marked by the appearance of small nests of star-shaped pigment cells, which, rapidly proliferating, collected into small clusters, which lay close to each other. Finally, all line of demarkation vanished, and we had before us a small conical hill of pigment, under which the foreign body was buried. August 4th, patient was discharged with V. $\frac{15}{20}$, and with normal field of vision. This condition remained unchanged during the five years of further observation.

CASE III.—SPONTANEOUS ELIMINATION OF A SPLINTER OF BRASS FROM THE INTERIOR OF THE EYEBALL, FOLLOWED BY RESTITUTION OF NORMAL VISION.

Mechanic, M., 25 years old, came to me, April 26th, 1881, with the following condition of his left eye: Slight lachrymation and photophobia. Intense peri-corneal injection, and considerable venous hyperæmia of the mucous membrane of the eyeball, which is especially pronounced in the segment bordered by the opened eyelids. In this part there is also serous infiltration. The outer border of the cornea, just opposite the insertion of the external muscle, shows an irregular, small scar, and beneath the latter there is a small, jagged loss of substance in the iris. The latter is hyperæmic, and of greenish color. Pupil dilates only slightly to atropia, and displays multiple filiform adhesions to the lens capsule. The latter is occupied by punctiform exudations. Vitreous humor is hazy. Background of the eye cannot be seen. Tension is slightly diminished, and the upper ciliary region sensitive to the touch. V. = $\frac{5}{200}$, Jaeger 18. The space between the insertion of the external muscle and the sclero-corneal border is occupied by a deep ulceration, having the form of a crater, the edges of which are hard, prominent and infiltrated. Through the layer of pus which covers the bottom of the ulcer, a glittering body, of the size of a pin's head, can be seen, which feels hard when probed. After the bottom of the ulcer had been cautiously cleansed, there could be distinctly recognized, best by means of a magnifying glass, a glittering three-pronged point of a foreign body, the whole of which was lodged in the interior of the eyeball. I succeeded to grasp the point with forceps, and to extract the whole body, which presented itself *as a fine, oblong splinter of brass*, of 2½ mm. in length.

Anamnesis revealed that, on February 13th, a chip of the piece of brass patient was just shaping on the lathe had struck his left eye, causing, immediately, intense pain, which kept on for hours. A physician, to whom patient applied at once, could not find the foreign body. The consequent inflammation was combated by all possible antiphlogistic measures, to which was added, in the third week, an attempt to remove a piece of iris, which is indicated by the jagged loss of substance in the iris, as referred above. But all these procedures failed to give any relief. Vision sank rapidly. April 20th, patient first noticed the appearance of an ulcer near the outer border of the cornea.

Compressive bandage, applied on both eyes, brought about quick and smooth closure of the wound. Irritation subsided entirely. After iridectomy vision increased to $\frac{15}{70}$. Vitreous humor cleared up, so as to allow ophthalmoscopic examination. There was equatorial choroiditis, whitish plaques, and disseminated clusters of pigment in the retina.

A mercury treatment, combined with the internal use of the fluid extract of jaborandi, brought vision to $\frac{15}{30}$. Vitreous humor clearedup almost entirely, and the whitish plaques disappeared.

—The *Boston Med. and Surg. Jour.* says: The necrology of both Harvard and Yale Colleges this year is of interest as showing the tendency to longevity amongst educated men. Of the 78 dead in the Yale list for the year, 31 were seventy years of age or over, the average being over seventy eight. Of the 71 dead in the Harvard list, 29 were over seventy, the average being over seventy-seven years. In each list the extreme age reached was ninety-six.

Hospital Reports.

HOSPITAL COLLEGE OF MEDICINE, LOUISVILLE, KY.

CLINICAL LECTURE, BY DUDLEY S. REYNOLDS, M.D.

Professor of Ophthalmology and Otology.

Stenographically Reported for The Medical and Surgical Reporter.

Otitis Media Purulenta.

Inflammation of the middle ear is a disease confined to no particular class of people, to no rank or station in life, although it would appear to be limited, in its geographical distribution, to those sections known as malarial. Tuberculous subjects, syphilitic subjects and habitual smokers are particularly subject to different forms of inflammation of the middle ear, the nature of the process being dependent always upon the cause. The catarrhal and the blenorrhœal may be generally though not always readily distinguished one from the other, as well as from other forms. It may perhaps be well to include the parasitic, which results from the invasion of the morbid process from without inward, through a perforated drum membrane, though it is not my purpose to consider in detail at present all the varieties alluded to.

It may be laid down as a rule in practice, that all discharges of pus from the external ear come from the tympanic cavity, through the perforated drum membrane. There are, however, a few exceptions to this rule, yet, if the rule be recognized and the practitioner proceed accordingly, the safety of the patient will be secured as far as medical skill may be relied upon. No one but the skilled aural surgeon may be able to determine the difference between those forms of otitis discharging pus externally from abscesses forming in the course of the external auditory canal, and those more common forms, the discharge from which originates in the cavity of the tympanum. If, however, the Eustachian catheter be employed with sufficient care in those cases where Valsalva's method of inflation is impracticable, the current of air may often be forced into the cavity of the tympanum, blowing out all the morbid contents through the perforated drum membrane, or where no perforation exists, by the counter current of air down by the side of the catheter, through the Eustachian tube into the fauces. The first point to be considered is the location of the morbid matter, whether it be pus, muco pus, or bloody serum. Otitis media is a very common form of catarrhal inflammation, extending by continuity of structure through the walls of the Eustachian tube from the pharynx to the tympanum, and it very rarely occurs in persons who are not already affected by the constitutional manifestations of malarial poisoning.

It is therefore important to supplement the local by constitutional treatment.

To illustrate these points, I have before you M. O'C., aged 9 years. She is well nourished, and has been apparently in good health until day before yesterday, when she appeared stupid at school; was kept in for not knowing her lessons, and when she returned home at 4 o'clock, complained of headache, and suffered from fever during the night. Yesterday morning she had a cough, was hoarse, and suffered from obstruction of the nose; last night she was seized with violent pain in the right ear, which has continued unabated to the present moment. She has been subjected to the application of hot flaxseed poultices to the ear and the whole side of the head. These I just a moment ago removed, and now examination shows a reddish yellow tint, and bulging of the drum membrane, the external auditory canal being entirely free from any kind of morbid material. Puncturing the posterior and inferior quadrant of the drum membrane allows a quantity of straw-colored serum to escape, and the child refusing to try Valsalva's method of inflation, I pass a Ginsoul catheter through the nostril into the faucial orifice of the Eustachian tube, and apply the nozzle of a Politzer's air-bag to the distal end of it, gentle compression being followed by a gurgling sound and the escape into the external ear of about half a fluid drachm of bloody serum and some shreds of lymph. (From the moment of puncture the pain abated, and as soon as the morbid matters were blown out of the cavity of the tympanum the child expressed herself as entirely relieved.)

She shall now be ordered to take five grains each of calomel and chlorate of potash in one powder, and ten grains of quinine as soon as this shall have operated upon the bowels. She is to report to-morrow morning, and I am confident, from past experience in such cases, that she will have no more pain, and that the trouble will by that time be so far recovered from as to allow closure of the puncture in the drum membrane, the accumulating fluids making their exit through the Eustachian tube into the pharynx.

Annie D., aged 7 years, has had a discharge from the left ear since infancy. The disease in her case came on much after the manner detailed in the case just before you. The family physician, after the drum membrane ruptured and the matter began to escape externally, said it would not be safe to arrest the discharge, lest the disease might go to the brain and prove fatal. His advice was accordingly taken. Two weeks ago, to-day, the child was brought here with a very offensive discharge from the ear and almost complete loss of hearing. Examination revealed depression of the drum membrane of the right ear and an absence of the inferior half of it in the left. The nose was occluded with pus; the posterior wall of the pharynx, as seen through the mouth, appeared glazed and intensely red.

The child had been under the treatment of a great many physicians, and, of course, a great variety of therapeutic measures had been tried. You may remember the astonishment expressed by her mother when, two weeks ago, to-day, with the aid of an atomizer and a solution of chloride of sodium, five grains to the ounce of water, the nasal passages were cleared. The naso-pharyngeal space was in like manner cleared, and the introduction of the Eustachian catheter first into the left side resulted in the blowing out of the ear a large quantity of tough mucus, a quantity of pus, and afterwards a little bloody serum.

The odor was horribly offensive, and I introduced about two drops of listerine into the distal end of the catheter, and applying the Politzer air-bag, forced it through the middle ear into the external canal. The bad odor was almost instantly overcome. The catheter was next applied to the right side, and the drum membrane easily forced into its proper position, a flapping, tearing sound, following each compression of the bag, was produced by the escape along the side of the catheter, into the pharynx, of the tough mucus which is generally present in chronic moist inflammations of mucous membranes.

The child's hearing was almost instantly restored to a degree permitting conversation to be heard. I have practiced the introduction of the catheter into the left Eustachian tube, and the application, as already detailed, of the listerine, almost daily, and now to-day, before I begin the treatment, you observe she hears my watch with the right ear at the distance of eight inches. The amount of discharge from the left ear is so slight that no overflow has occurred to-day. The mother informs us that the child's ear was washed out with a syringe and salt water, as usual, early this morning, after which two or three drops of listerine were instilled. There is at present but a faintly perceptible odor accompanying the discharge. The pus is no longer present in the nose or pharynx.

The only treatment for the nasal and pharyngeal affection, aside from the use of the atomizer, with the chloride of sodium, followed by a dilute preparation of listerine—one part to three of water—has been the occasional snuffing of the powdered borate of soda.

Miss W., æt. 24, has had a discharge from the right ear since infancy. She had a polypus in the left ear, which filled up the whole canal, and extruded nearly half an inch beyond the tragus. She said this had been removed a great many times by different surgeons, but it always returned. One month ago to-day, you may remember, I injected it with a 60 gr. solution of chromic acid. A week afterwards there remained only a small portion of the stump, which was again likewise injected.

The whole mass of morbid tissue disappeared. The right ear was catheterized from time to time, and listerine blown through the catheter, in order to insure its contact with the walls of the tympanum. The drum membrane has been partly renewed in the right ear, and almost wholly so in the left, the polypus having sprung from the petrous portion of the temporal bone, near the point of union between the drum membrane and the wall of the auditory canal. There is now but a very slight discharge from each ear, no offensive odor, and the patient is able to hear all ordinary conversational tones. You may remember, when she first came to the clinic she was almost entirely deaf, and stated that she could not hear it thunder, though she could see it.

Mr. H., æt. 23 years, lives in Charleston, Indiana; came two months ago with an offensive discharge from both ears, unable to hear the loudest tones distinctly enough to conduct a conversation. I present him to you to-day, with a small perforation in each drum membrane, no discharge whatever, and, as you perceive, able to engage in ordinary conversation. He hears my watch, which should be heard at thirty-six inches, four inches from the right ear, and by slight contact with the pinna of the left. Mr. H. has been treated regularly twice a week, as most of you know, by the introduction of the Eustachian catheter, first blowing out all morbid materials from the tympanum, and then the introduction of one drop of the listerine, which was blown through the tympanic cavity. He has used powdered white sugar and tannic acid, in the proportion of a drachm of the acid to the ounce of sugar, as a snuff, twice every day.

His pharynx, which was filled with purulent accumulations, now presents very nearly a normal appearance, and his voice is clear, whereas before it was muffled. I may mention that he has taken iodide of potassium, beginning with ten grains every four hours, and increasing by the addition of five grains to the dose every ten days, until he now takes thirty grains. There is no history of syphilis, and he presents none of the characteristic phenomena. The iodide of potassium was suggested by the engorged state of his lymphatic glands. His tonsils, which were larger than almonds, are now invisible. Thus you see Mr. H. has been relieved of what, for years, rendered him odious to his friends in a double sense. The odium of being too deaf to engage in conversation, has disappeared, as the odor which offended the nostrils of his companions has likewise passed away.

Unable to go more fully into the subject, I feel that, from the cases before you, two important points as to local treatment, or rather as to the action of local agents, should be mentioned more particularly. First; there is in such cases the necessity for an agent which has the power to dissolve the fibrinous matters upon the surface of the inflamed mucous membrane, and immediately following this, an agent which has gently stimulating, astringent and antiseptic powers. The first agent, as you have seen, is found in the chloride of sodium, the second in listerine. Listerine is something more than a mere antiseptic, which its inventor, Mr. Lambert, has very extensively advertised as its chief virtue. It is a stimulating, balsamic astringent. It contains boracic acid, the essential oil of eucalyptus globulus, thymol and some other less important ingredients. It mixes freely with water, and may be used as a local application to all purulently inflamed surfaces, diluted to any extent desirable, or as in the cases before you, in full strength. With chloride of sodium and listerine, you have, therefore, but little to desire in the way of local applications in otitis media purulenta.

Medical Societies.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, Thursday, October 5th, 1882. Vice-president, T. M. Drysdale, M.D., in the chair.

Dr. W. Goodell exhibited the specimens, and gave the histories of the following cases.

Renal Cyst.

Mrs. C. M. G., aged 52, and married for twenty-eight years, has had three children, the youngest of whom is twenty-five years old. For many years she has had pain in the left renal region, and sharp attacks of gravel. This pain was so increased by jolting, that she was unable to drive, even in a carriage with double springs; but she has never experienced the excruciating pain of a stone passing down the ureter; of this she is positive. Four years ago she began to enlarge, but she did not suspect a tumor. As her health grew worse, she came on from the west, and in last July consulted Dr. J. F. Bird about it. He recognized a cyst, and called Dr. Goodell in to see her. Despite her age, her catamenia were not only regular, but too free. Dr. G. expected to find a fibroid, but the womb measured only three inches, and it was also very movable and wholly independent of a large cyst which filled up the abdomen like an eight months' fœtus. The lower edge of the cyst could be felt per vaginam, lying in front of the womb. Percussion elicited all the phenomena peculiar to ovarian cysts. Coronal resonance was marked. There was dullness in front, showing the complete absence of intestines from that region, their presence being alleged to be one of the most trustworthy signs of a renal cyst. As the lady stated positively that there were changes in the size of the tumor, Dr. G. was disposed to regard it more as a cyst of the broad ligament, than one of the ovary.

The operation was performed on September 16th. As soon as the cyst was reached it was ascertained that it was not ovarian or parovarian; but it was fully fifteen minutes before its true character was discovered. The cyst was covered with a very vascular but loose layer of peritoneum, to which, in the lateral regions, the intestines were attached and in which they seemed to be imbedded. This was cut open and stripped off from the whole cyst, which now revealed, on its lower border, an expanded and healthy portion of the left kidney. To confirm the diagnosis, a small calculus was found within the cyst and a much distended ureter discovered. The pedicle formed by this process of enucleation consisted, below the ligature with which it was secured, of the renal blood-vessels enveloped in connective tissue. But to get a button of tissue sufficient to prevent all slipping of the ligature, the operator was obliged to leave on its distal side a small portion of the cyst, but none of healthy kidney.

It was evidently a case of hydronephrosis, but the uterine sound was passed into the ureter and no obstacle was met with; it probably did not reach the bladder. This ureter was brought out at the lower angle of the wound and secured there by one of the sutures. Nineteen days have now elapsed since the operation, and the lady has done uniformly well, and sat up to-day, for the first time.

Hydatid of Morgagni,

The lady from whom this specimen was taken was operated on by Dr. Goodell, on September 4th, and promptly recovered. The cyst was of the left ovary, but the right one, being also diseased, was also removed. Attached to one of the fimbriæ of the oviduct is a very beautiful specimen of a hydatid of Morgagni. This little body, so often found attached to the ovary, was of interest, because those small cysts of the abdomen which, after obtaining a small size, would burst and usually refill, were, in Dr. Goodell's opinion, cysts of this hydatid.

Cyst of the Parovarium.

This specimen was taken from a young woman, aged 22. The tumor was first noticed eight years ago. Dr. Goodell aspirated her before the clinic at the University of Pennsylvania, in October, 1880, and November, 1881. On each occasion a perfectly limpid fluid was removed, and the diagnosis was consequently made of cyst of the broad ligament. As the cyst again refilled, she demanded its removal, and she was accordingly operated on before a ward-class, on September 19th. The cyst sprang from the left side, and had the usual delicate and vascular wall. Spread out on its lower border is the corresponding ovary, which could be very readily overlooked by a careless observer. The right ovary being much enlarged, and filled with small cysts, was also extirpated. When first removed, it contained a fine corpus luteum, but the alcohol had dissolved this out, leaving merely the deep pit which held it. The operation was performed just two weeks after her last monthly period. The usual metrostaxis occurred on the fifth day after the operation. The patient is convalescing well.

Papillomatous Uterine Growths.

Dr. W. H. Parish exhibited two vials containing apparently similar growths, removed from the endometri of two patients, one of which, from concurrent symptoms, he considered benign, but the other he thought malignant. In the first case menstruation had ceased for a year, after which it had returned and become constant and profuse. She had suffered from prolapse, following labor, twelve or fifteen years ago. Dr. Parish dilated the uterus with two sets of sponge tents, after which he introduced his finger and found a number of elevations as large as peas; some of these he removed by means of curettes, and others by seizing them with forceps and twisting them off. Some metritis followed the operation, but no blood has been lost in the last four weeks.

The second specimen was removed from a carcinomatous uterus, by means of the curette and the écraseur.

Dr. Goodell remarked that he did not allow the revelations of the microscope to govern him in his treatment of bleeding uteri. He had under his care recently three such cases, all of which were reported by noted microscopists to be carcinomatous, but one of these cases was entirely cured by local measures.

One case of lacerated cervix, with ectropium and free hemorrhage, which was pronounced undoubtedly cancerous by a microscopist of high repute, was relieved by scraping, and cured by operation. Another case, pronounced cylindrical epithelioma by the same gentleman, recovered after operation.

A patient of Dr. C., while in this city, was re-

ferred to me for examination as to the cause of persistent menorrhagia. Ether was given and a careful and thorough examination made, and the round and sharp curettes were used, but Dr. Goodell could find no cause except a few minute granulations. This class of cases is usually found among stout or plethoric women, and the hemorrhage will recur after any treatment, although temporary benefit can be obtained. When the curette is passed over the walls of the uterus it exercises a tonic effect, and a contraction results, checking the hemorrhage

Dr. A. H. Smith has had under treatment a number of cases of marked anteflexion, generally in young girls, in whom dysmenorrhea is followed by very profuse menorrhagia, which proves very exhausting, and will not yield to internal remedies. Examination shows no recognizable cause, but a stem pessary will secure entire relief in a few months. He has seen six such cases within the last three years. He has had under treatment cases resembling epithelioma of the uterus, in which the introduction of a large sponge tent has resulted in complete cure and secured the cessation of profuse and hitherto uncontrollable hemorrhage.

Dr. Parish: Some cases of incurable hemorrhage are due to inflammatory adhesions of the uterus to surrounding tissues, which will disturb the circulation and modify nerve action. He considers the smooth wire curette a valuable aid in diagnosticating the condition of the endometrium as its passage over the uterine wall will distinguish between healthy and unhealthy uterine tissue.

A patient suffering from uterine hemorrhage for three weeks following a possible miscarriage at three months, was cured by one application of the smooth curette, which brought away some granular matter.

Editorial Department.

Periscope.

Recovery from Traumatic Tetanus.

At a recent meeting of the Cambridge Medical Society, *British Medical Journal*, Mr. Shields related the case of a lad who had recently been treated in the hospital, for tetanus, and recovered. A healthy country lad, aged 17, was admitted on May 30th. He was suffering from an extensive lacerated, contused wound, on the flexor aspect of the left forearm, the result of the explosion of a gun. The superficial muscles were extensively disintegrated; the radial artery was torn away, but the main nerves had escaped injury, and the ulnar artery was intact. The wound was treated by poultices and carbolized oil, and all went well until June 17th, when symptoms of tetanus set in, with slight stiffness about the muscles of the jaws and of the neck. On June 19th these symptoms had become more pronounced; well marked trismus was present, with epigastric pains. By June 23d the disease was fully developed. Severe spasms, especially of the muscles of the back, were constantly present; the tongue was foul, the breath offensive; the bowels were constipated, and the pulse quick; while the temperature was high, and the urine scanty and high colored. Excessive sweating was also present, so that an eczematous condition of the cutaneous surface was produced. From June 23d to July 12th the symptoms were very severe. Marked opisthotonos was observed, and the patient became rather emaciated. On July 10th the disease was on the wane. Gradually the spasms grew less severe; the bowel acted naturally, and the appetite improved, while the patient was walking about the ward, and his wound nearly healed, and all tetanic symptoms were gone. Throughout the whole case, the temperature was, for the most part, above normal—presenting curious diurnal variations. On several occasions it reached the height of 104° and 105°. The pulse was quick and weak, and varied slightly with the temperature. The treatment adopted depended chiefly upon feeding and nursing. Plenty of good milk and eggs, with port wine and brandy, were frequently administered, both by day and night, and fortunately swallowed and retained by the patient. Hypodermic injections of morphia were administered every evening, and caused relief and some snatches of sleep. The bowels were relieved by enemata; and during their peristaltic action the patient seemed to have his sufferings increased; but after the evacuation the pains were alleviated. He smoked tobacco twice, and this gave him some relief from the accumulation of mucus in the fauces. Dr. Humphry believed tetanus to be a passing malady, depending probably, like smallpox, scarlet fever, and others, upon some blood poisoning; like them being amenable to no known treatment, but running a certain course and subsiding, provided it did not kill the patient. Of the rapidly progressing cases, very few survived; whereas in those which came on more tardily, and more particularly in those in which the patient continued to be able to take food, a favorable result might not unfrequently be obtained. The disease was attended with much wasting and exhaustion, sometimes with high temperature; and the most important feature in treatment was to give nourishment, which must generally be in a fluid form, milk, eggs, beef tea, wine, etc., as much as the patient can take. While food could be swallowed, there was hope; and it must be urged upon the patient. Sedatives, such as morphia hypodermically injected, tobacco, etc. come in as adjuncts in more severe cases; but reliance should be placed on the feeding, with attention to the bowels, it being commonly necessary to give aperients. In some cases he had

found tobacco, smoked or administered in a mild form, to have a soothing effect. He had kept patients persistently under the influence of chloroform without any benefit. The maintenance of strength by nourishment, so as to enable the patient to tide over the attack, was the great thing to be aimed at.

Anencephalic Monster.

At the last meeting of the South Carolina Medical Association (*Transactions*) Dr. A. A. Moore related the following case:—

I was called into the country, December 12th, 1880, to attend Mrs. M., in labor, a primipara, aged twenty-four years. She had been in pain all the previous night, and when I arrived at her house, about 10 A. M., the pain was incessant, although it came in occasional paroxysms of increased severity. The pulse was more frequent than natural, but did not indicate exhaustion, and the respiration was normal. As is often the case, there was constant dribbling of the amniotic fluid from the vulva, and yet the distention of the abdomen did not sensibly diminish. It was unnaturally prominent and rotund, so that there was no projection of any of the bony points of the fœtus; and, in consequence of its large size, I began to suspect that I had a case of twin pregnancy to deal with. On vaginal examination, I found the external parts moist, soft, and in a proper condition for an easy delivery. The os uteri was only partially dilated, and what appeared to be the amniotic sac was very tense and unyielding, so that I could not discover even the presentation; I waited two or three hours longer until the os had fully dilated, when I ruptured the sac with my finger, and there was a long and copious gush of water, flooding the bed up to the patient's shoulders, and running down on the floor. Examining again, I recognized the rugged, deformed head of the child presenting. After a few severe throes, a hideous monster was delivered, stillborn, a photograph of which is here presented. The frontal bone down to the superciliary ridges, the whole of both parietal bones, and the occipital bone, except the basilar process, were all wanting. In other words, the whole vault of the cranium was absent, there being no visible trace of a brain. A thin fringe of black hair bordered the flat surface of this imperfect skull. There was also complete absence of the cervical vertebræ, the head being firmly fixed upon the thorax. In addition to this there was a cleft in the spinal column, immediately below the head, forming spina bifida, into which, and down the vertebral canal, I passed a probe its entire length. The child (a female), though small, was perfectly formed in every other respect. I believe that what was apparently a distended amniotic sac, was in reality a very large dropsical effusion of the encephalon, attended by deficiency of the bones, muscles and integuments, and it was this that I ruptured, and that retarded the progress of labor.

The mother of the child is a blonde, very well developed and healthy. On inquiry, I could not trace this deformity to the questionable influence of any maternal impression. The father is twenty-nine years old, of dark complexion, with black hair and eyes. He has been treated for phthisis, I believe, and has been quite dissipated in his habits. Whether his consumptive tendency, or his besotted life, or both, had any agency in the procreation of this unsightly offspring, I will not attempt to discuss.

In the July number, 1867, of the *American Journal of the Medical Sciences*, I reported an almost exactly similar case, except in that instance there was no fissure of the spinal column, and the cervical vertebræ were present and perfectly formed.

Strangulated Hernia in a Woman Aged Eighty-five—Recovery.

Dr. C. A. Owens reports the following case in the *Lancet*:—

On September 23d, 1879, I was called to see M. S., an old woman, aged eighty-five, who was suffering from sickness and constipation. I found that these symptoms had been present for 120 hours, and were due to the presence of a right strangulated femoral hernia. There was a tense, hard, painless tumor in the corresponding region; she had the usual anxious expression of countenance; pulse 75; temperature 101°. The vomiting was not stercoraceous. Having tried the taxis carefully, but without success, I applied an ice bag to the tumor, and tilted up the foot of the bed, which proceeding had enabled me to succeed in reducing a hernia under similar circumstances. Later in the day I again visited the patient, and finding reduction impossible, I administered chloroform to her, with the understanding that if taxis then failed I should proceed to operate without further delay. Taxis not succeeding under chloroform, I operated in the usual way, being obliged to open the sac, and relieving the stricture by slightly nicking Gimbernat's ligament. The bowel was congested, but retained its natural lustre, and was returned into the abdominal cavity without any difficulty. The wound was closed by sutures, and dressed with a pad of lint supported by a spica bandage. The patient rallied well after the operation, and I left her comfortable, with instructions to take an opiate, to procure sleep.

September 24th. Patient cheerful; had rested well without the opiate, which she declined to take, as well as a stimulant in any shape; no pain; temperature 101.5°; pulse 72. 25th. Patient, though uncomplaining, was not quite so well; her temperature had gone up to 103°; pulse 96, and intermittent; no sickness and no tenderness of abdomen. 26th. Patient better; pulse 96; temperature 102°. 27th. Much better; temperature 100°; pulse 112. Bowels had moved naturally without medicine. The patient continued to improve.

October 1st I removed the dressing, and found the wound entirely healed; sutures removed. From this date the patient advanced rapidly to perfect recovery without any untoward symptoms.

Remarks.—This case is worthy of notice, on account of the very advanced age of the patient (eighty-five) and the length of time the hernia was strangulated. No credit can be given to opium, as she took none, either before or after the operation; nor to stimulants, for the same

reason, the patient having a decided aversion to their use. She was out in the fields, gleaning, in three weeks, and is alive and well now, at the advanced age of eighty-eight. I was assisted by my partner, Mr. Barton, during the operation.

Vaso-Constrictor Nerves.

The *Lancet* says that an elaborate study of the sympathetic nerves which cause the dilatation of the vessels of the mouth and lips has been made by MM. Dastre and Morat. Two years ago they announced the discovery, in the cervical trunk of the sympathetic, of filaments, the function of which is to cause dilatation of the vessels of one region of the head, and thus to antagonize the action of the other fibres of the sympathetic. If the spinal cord is divided in the lower part of the neck, stimulation of the posterior segment causes a primary dilatation of the vessels of a large part of the head, especially in the region of the ear and of the mucous membrane and skin of the nose and mouth. The result is the same in the cat, rabbit, hare and dog, and seems to show that vaso-dilator nerves arise from this part of the spinal cord. If the dorsal nerves, from the second to the fifth, are exposed, divided, and the peripheral ends are stimulated, dilatation of vessels occurs, but in a limited region of the mouth and face, and only in the dog. The result only follows stimulation of the anterior roots. Hence, in this animal, at any rate, the vaso-dilator nerves seem to leave the cord by this path. A similar experiment with the branches from these roots to the sympathetic, gives the same result and conclusion, and may, in like manner, be followed up the cervical sympathetic trunk. Many fibres were traced by the experimental method into the fifth nerve. The course of the nerves being thus ascertained, an attempt was made to excite them by an agent less artificial than electricity. Asphyxial blood is a powerful stimulant to the central nervous system, but it stimulates both classes of vascular nerves, and one or the other effect may predominate. In the bucco-facial region the effect of asphyxia is congestion. If the sympathetic is divided on one side, the congestion is much slighter, sometimes is absent. Hence the asphyxial vascular dilatation must be due, in part, at least, to the influence of these sympathetic fibres. A dilator action may also be excited by reflex influences. Stimulation of the central extremity of the divided vagus, isolated from the sympathetic in the lower part of the neck, causes a primary and bilateral dilatation, which is lessened or prevented by preceding division of the sympathetic. It is also prevented if complete muscular relaxation is produced by the inhalation of chloroform, or if the spinal cord has been divided. It is especially considerable if the stimulation is applied to the superior laryngeal nerve, or to the trunk of the vagus, as far as the origin of the pulmonary branches, but is almost absent when the stimulation is below this point. Bucco facial congestion may also be produced by excitation of the central end of the sciatic or of the tibial nerve, and probably also of other cutaneous branches. A certain degree of congestion is produced by asphyxia, and by reflex excitation, after the division of the sympathetic; and when sufficient time has elapsed to permit the degeneration of the nerve fibres, stimulation of the superior maxillary nerve still causes a certain degree of congestion of the corresponding lip. Hence the cervical sympathetic appears not to contain all the vaso-dilator nerves of this region. In this respect the dilator nerves of the vessels resemble the dilator nerves of the iris, which run in part only in the sympathetic trunk.

On the Bacteria of Typhoid Fever.

The *Medical Times and Gazette* says that Dr. Ernest Almquist, of Stockholm, who had been assiduously occupied for eight months in proving the presence of a bacterium (microbe) in the living blood in typhoid fever, records in the *Nordiskt Medicinskt Arkiv*, 1882 the conclusions at which he, so far, has arrived He made these researches on a considerable number of preparations of normal and pathological blood, before coagulation. After coagulation, formations are found in the blood, which are perfectly similar to bacteria, and are probably formed from torn meshes of fibrine. In the blood of persons suffering from typhoid fever, bacteria are frequently found, but very small and very few. Each bacterium has the appearance of a cylindrical, short and slender rod, the extremities refracting light more powerfully than the middle, which appears more transparent. Still more rarely there are found in typhoid fever other formations—as short protoplasmatic threads, or as ovoid grains. On rare occasions he has detected the presence of an enormous mass of bacteria; but only for one or two days, in the whole course of the fever. It is not certain that a greater number will be found in severe than in abortive cases, for in these latter Dr. Almquist has often discovered a considerable number. The bacteria are found most frequently in the second and third weeks. He thinks it necessary to search for pathogenic bacteria at the bedside of the patient, and then they are found in the blood in the purest possible condition. To obtain certain results, pure seeds must be obtained if it is wished to cultivate them or to inoculate an animal with them. Workers have, he says, too much neglected researches of this kind, and they have sought for the bacteria of a patient in the excretions, in the dead body, and even in the earth itself. In the case of typhoid fever much time and trouble are necessary, in order to find a number of bacteria sufficient to cultivate them so as to make them serve for inoculation; but it is worth the trouble, for the harvest, once found, soon gives results. In many infectious diseases it will be undoubtedly very easy to procure them, and perhaps it will be possible to fix the very day when the bacteria will be most frequently found in these cases. It may be presumed that the pathogenic bacteria can be perfectly cultivated in normal blood, especially in that of a person who has never been attacked by the fever. Dr. Almquist has cultivated this bacterium, taken on the eleventh day from the blood of one of the cases described, in a drop enclosed between two glasses, one of which was concave. From this drop there were prepared successively a series of generations, and

from the second generation he succeeded in inoculating a dog, with good results. The animal was hardly ill, but on the fifteenth day he found the Peyer's patches much swollen, and containing characteristic bacteria. Without having yet finished his researches, Dr. Almquist thinks that he is able to form the following opinions, viz.: The bacterium (*microbe*) of typhoid fever is found in the blood only by accident; it vegetates principally in the walls of the intestine, and only in very small numbers in ordinary cases, and, if more are found, he thinks they are thrombi of bacteria, which, having been detached from their places, circulate in the blood, broken into particles. He then describes six forms of bacteria, which are illustrated by microscopical drawings. He thinks, from his researches, that the microbe he describes cannot strictly be classed among the genera *Bacillus*, *Micrococcus*, or *Bacterium*, but that the series of developments comprises the following phases, viz.: The spore shoots forth a thread; several threads form a network, a mycelium, or a zoogloœa of threads. If the spores are completely formed in the threads, then the zoogloœa of threads may be transformed into a zoogloœa of delicate grains. Dr. Almquist has not yet concluded his researches, to which he intends shortly to return.

Hypodermic Injections of the Atropia Salts.

The principal physiological effects of administration of the salts of atropia are: dryness of the mouth and throat, dilatation of the pupils; in larger doses, difficulty in speaking and swallowing, numbness of feeling in the face, amaurosis, cephalalgia and vertigo, gay or sad delirium; hallucinations, nausea; slowing up and later acceleration of the pulse; scarlatiniform redness of the skin, œdema, etc. When toxic doses are given, besides the symptoms already mentioned, there is aphonia, muscular spasms, collapse, and finally death with arrest of heart in diastole. The toxic phenomena supervene in from two to ten minutes when the drug has been hypodermically injected.

No local accidents are observed after the subcutaneous injection of a solution containing the neutral sulphate or the valerianate of atropia, provided the solution be absolutely pure and contains neither acid nor alcohol. A good solution for hypodermic use is the following:—

℞. Atropiæ sulphat.,	gr. iss	
Aquæ destill.,	℥ iij$\frac{1}{2}$.	M.

Twenty drops of this solution contains about one-sixteenth of a grain of atropia. Small doses, not more than one-twentieth of a grain (10 drops), should be used at first, and the dose of one-thirtieth of a grain (40 drops) should be rarely exceeded.

In the following prescriptions, morphine is associated with atropine, and good effects are obtained in combating pain and insomnia. The following is a prescription employed by M. Dujardin-Beaumetz:—

℞. Morphiæ muriat.,	gr. iss	
Atropiæ sulphat.,	gr. $\frac{1}{6}$	
Aquæ lauro-cerasi,	℥ v.	M.

Fifteen drops of this solution contains one-third of a grain of morphine, and one-twentieth of a grain of atropia. The following solution is employed by M. Gueneau de Mussy:—

℞. Morphiæ muriat.,	gr. viij$\frac{1}{3}$	
Atropia sulphat.,	gr. $\frac{1}{6}$	
Aquæ destill.,	℥ iiss.	M.

Fifteen drops, about one gram, of this solution contains one-sixtieth of a grain of atropia and five centigrams, or about one grain of morphine. About four drops will be the proper dose to commence with. This association of atropine with morphine has been recommended by such observers as Brown-Sequard, (1860), Harley, Frankel, Prevost, etc. From a therapeutic point of view, atropia is indicated particularly in neuralgia, asthma, incontinence of urine, constipation, chorea, intestinal occlusion, vaginismus, tetanus, epilepsy, sweating in phthisis, vomiting of pregnancy, etc., but its best effects are obtained in excessive sudation or intense pain.

Medical and Surgical Uses of Belladonna and Atropia.

In the *Lancet*, Dr. J. H. Whelan says:—

Without going deeply into physiology, let me briefly summarize the evidence of cardiac inhibition, its causes, and the effects of atropine.

1. If we send an interrupted current into the exposed vagus of an animal, after an initial latent period (which is .16 of a second in the rabbit, according to Donders), the heart stops beating and remains in diastole.

2. If we give a dose of atropine before applying the electrodes, no such thing takes place.

3. The application of muscarin or pilocarpine seems to produce profound cardiac inhibition, which a small dose of atropine removes.

4. Nicotine paralyzes the cardio inhibitory vagal fibres, after first stimulating them, while atropine seems to have an effect on the heart itself as well. The results of experiments teach us that the hypodermic injection of atropine before chloroform inhalation may ward off death itself. In some extreme cases of hysteria or allied disorders, we have patients going from one faint into another; frequent syncopic attacks. In the allied abnormal condition of pregnancy, that called by old authors hypothæmia, we have the same condition. In both, this drug ought to prove extremely useful. In the former we have impulses originating probably in the higher centres, causing frequent inhibitions; in the latter the uterus takes the place of the brain. I once saw a very interesting case under Surgeon Hamilton, in the County Meath Infirmary. A man was brought in suffering from slight localized abdominal tenderness and obstinate constipation. The pain increased, and the pulse became very weak and fast, while the constipation continued, in spite of many remedies. He was ordered a grain of extract of belladonna every hour. After the second dose the pulse had improved wonderfully, and assumed the normal type in all characters. He got ultimately worse and died, when a perforating ulcer of the pylorus was found. Leaving diffi-

cult explanations aside, I think we have in the deadly nightshade a means by which we can prevent persons from fainting. By the hypodermic use of atropia the surgeon may remove the effects of the shocks of gigantic wounds of railway accidents and battle. I remember a hysterical girl in whom I at different times opened a minute abscess and removed two dental stumps. By each little operation she was caused to faint several times. Finally, in the last instance, before using the instrument, she was given twenty-five minims of tincture of belladonna, with the result that she did not faint, neither did she manifest any signs of weakness. If, then, as it seems, we are in possession of a drug which will prevent cardiac inhibition, cases of "death from shock" ought to fade from the death register of surgical practice. Belladonna will be found sometimes serviceable in nocturnal emissions, when these are accompanied by erections.

Dr. Gentilhomme, of Reims, has used a pill containing $\frac{1}{100}$ of a grain of sulphate of atropine in coryza, with marvelous results. Fifteen minutes after the first administration all sneezing had ceased, the secretion stopped and respiration became normal.

Reviews and Book Notices

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. V. H. Taliaferro, of Atlanta, Georgia, gives further evidence of the value of systematic pressure in uterine disease, in a reprint of 20 pages, before us. It is well worth the careful perusal of gynecologists. The author will supply copies.

——In a reprint from the *Archives of Ophthalmology*, Dr. Julian J. Chisholm, of Baltimore, narrates two interesting cases, one of cataract extraction with iridectomy, in an infant only six months old, the other of congenital paralysis of the sixth and seventh pairs of cranial nerves, in an adult.

——The Medico-Legal Society of New York has got into a row about publishing its Transactions, and the Treasurer, Dr. E. C. Harwood, has come out in a pamphlet of 32 pages, explaining why he declines to pay the printing bills. Doctors never did get along well with lawyers. Of course, we believe the doctor is in the right.

——The value of a bandage and compress in present or threatened mammary abscess is extolled by Dr. Geo. H. Noble, of Atlanta, in a reprint from the Atlanta *Medical Register*. The measure is undoubtedly a useful one, but it is by no means so new as Dr. Noble seems to think. It is frequently mentioned in German gynecological works.

BOOK NOTICES.

The Treatment of Diseases by the Hypodermatic Method. By Roberts Bartholow, M.A., M.D., etc. Fourth Edition. Philadelphia: J. B. Lippincott & Co., 1882. 1 vol., 12mo, pp. 365. Cloth, price $2.00.

The author, in his preface, makes an appeal in favor of the substitution of the form hypodermatic for the more usual hypodermic. The former has the authority of Aristotle, and is more consonant with the rules of derivation in Greek Grammar. The revision of the text has been thorough, and the additions amount to 114 pages. A careful survey and estimate of all the recent accessions to the literature of this therapeutic method are presented, and probably there is no other monograph on this subject, in any language, which is so complete. The method is one of the greatest value when properly used. By no other means can we produce equally prompt and pleasing results. The hypodermic syringe is now, to the intelligent practitioner, as indispensable a part of his personal equipment as the lancet was fifty years ago.

Fistula, Hemorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum, their Diagnosis and Treatment. By William Allingham, M.D., etc. Fourth revised edition. Philadelphia: P. Blakiston, Son & Co., 1882. 1 vol., 8vo, cloth, pp. 168. Price $1.25; in paper, 75 cents.

This excellent monograph has had a just popularity, and the author has in the present edition availed himself of his more extended experience, to add materially to its value. It is, indeed, probably, the most satisfactory treatise extant in its peculiar field.

On Asthma, its Pathology, and Treatment. By Henry Hyde Salter, M.D., F.R.S., etc. William Wood & Co., New York.

The above is the September number of Wood's "Library of Standard Medical Authors." Dr. Salter's work has not previously been republished in America, although for many years in England it has been a popular monograph. It is, to be sure, not very well "up to the times." Several of the new remedies in asthma which we have looked for in its index are not mentioned. But as a meritorious exposition of the older methods of treatment and pathology it still has solid value.

THE

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A PHYSICIAN'S DUTY TO HIS PROFESSION.

"Every professional man," says Lord Bacon, in an oft-quoted passage, "owes a debt to his profession." We say this is an oft-quoted passage, but we doubt if its exact intention is often thought over.

Bacon, no doubt, was reflecting that the professions occupy the honorable positions they do, solely through the labor that has been bestowed upon them by our predecessors in them. The fruit of this labor we inherit on entering a profession; we, therefore, are morally bound to add something to the general mass of learning, which bestows its dignity on our profession.

No one has a right to practice medicine, for example, solely to get a living: not even ought he to do it solely for benevolent purposes, though we know no one who is open to this charge. While it is a business, and is to be treated as such, every physician should feel that duty demands from him that he add something to the general stock of medical knowledge. We can do this in many ways.

With the numerous societies that are now organized, he can always share the best results of his experience with appreciative colleagues. With a medical press as active as ours, if he has any taste for writing, he can always address a large audience through the columns of a journal. In many States, the State Medical Society, or the State Board of Health, are always desirous of information on local diseases and medical climatology, on vital statistics and domestic hygiene.

No matter how remote from the centres of professional labor he may be located, no matter how limited or monotonous may be the circle of his observation, every physician could, if he would, and studied how to do so rightly, add materially to the fund of scientific knowledge.

Suppose such a one was to review all the features of his locality, geological, topographical, meteorological, botanical, hydrographical, and having grouped them properly, endeavor to find out how they affected longevity, the general health, the course of common diseases, the production of uncommon ones, the progress of epidemics, etc. We care not where such a study were made, if judiciously carried out, it would be read with profit by physicians in every part of the world.

Gœthe has said that the secret laws of all vegetable growths are illustrated in the humblest weed. This our profession may say: that within the purview of every one of its members is enough to keep him busy, with profitable study, for life.

Let no one complain, therefore, that he has no chance to find out anything new; that his "opportunities" are too narrow. It is not the opportunities that are at fault, it is the capacity to utilize them.

Professor Virchow said, in one of his lectures, that of ten medical students to whom he would show a pathological specimen, nine could not see it. That is, they could not understand its bearings and significance. He justly deplored this absence of the faculty of observation. But the absence is not irremediable. If a man sets about it with right good will, he can overcome any such deficiency. Inertness, narrowness of view,

routinism, indifference to higher motives, these are the foes of most serious power.

We urge, therefore, those who feel this lethargy creeping upon them to resist it. Especially is it destructive to young men. They should determine not to grow rusty; they should always cherish some purely scientific part of medicine; they should make it a rule to read a new book, and to write an article for a society or journal, every few months. Thus they will avoid the fatal mental dry-rot that attacks so many.

THE ADVANTAGES OF COUNTRY LIFE TO LITERARY MEN.

It is a significant and noteworthy fact that many of the greatest lights of the literary world have resided in the country. It is a universally admitted fact, by those competent to judge, that a residence away from the centres of commercial activity, in other words, a suburban residence, is most conducive to physical health. So, it would seem, is it to the mental health and activity of man. That this should be so, is not to be wondered at, when we remember that it requires a *sound body* to enclose and develop a *sound mind*. But independently of the corellation of physical and mental force, aside from the influence that a healthy body has on mental activity and fertility, there are other reasons why country residence is calculated to be beneficial in an especial manner to the literary worker.

Continuity of thought, in the first place, is very essential to literary progress. If a man desires to accomplish a certain problem in psychical life, it will require a certain time, according to the rapidity with which he is capable of performing mental labor. If a man starts out to walk a given distance, it will require a certain time, according to the ability he possesses for walking. If, now, in either pursuit interruptions occur, the accomplishment of the proposed task will be delayed, just in proportion to the number and duration of these interruptions. In the ever changing panorama of city life, in the almost inevitable and numerous demands upon the time of a resident of a large city, from one source or another, the absence of such interruptions is well nigh impossible.

In the second place, communing with nature and all its wonderful works certainly does have a refining, elevating and purifying influence on the thoughts that may have been suggested by more worldly surroundings.

It is true that the surroundings and necessities of city life bring up to the mind subjects for consideration, but the country is the place in which to elaborate and perfect them.

This idea is carried out by experience.

The country air of Gad's Hill enabled Dickens to perpetuate his wonderful pictures of metropolitan life.

The pure air of small New England villages has enabled our great American poets to sing the songs of beauty that will make their names forever revered; while it was stated at the recent meeting of the British Medical Association, that some of the greatest elements of progress in our profession had been contributed by country doctors; indeed, the very founder of that time-honored institution was himself a provincial physician.

Thus, then, while the crowded city offers peculiar advantages to the commercial spirit, while therein money can be best accumulated, yet the higher type of manhood, the lover of thought, he who ponders that he may by so doing benefit and advance his fellow men, will find the best pasture upon which to browse his noble aspirations in nature's sweet and pure country.

ONE OF THE DIFFICULTIES OF JOURNALISM.

Readers of a journal like ours expect to get all the latest medical news. Whatever may have been detected new in the wide field of medicine, if it is in England, France, Germany, Italy, Russia, or anywhere else, a subscriber to a medical journal expects his to be the first communicating the latest facts. But very few have an idea how many foreign journals have to be read through, and what the difficulties are under which an editor of a medical paper labors. The Russian physicians, for instance, are of late making rapid progress, and we have often already re-

ported interesting cases, directly translating them from Russian journals. But that this is not an easy work, that their language is a very difficult one, we want to give our readers some little idea, by simply mentioning the *titles* of a few Russian medical journals which are at the disposal of the editor of that branch in our paper:—

"Westnik Ssudebnoi Medizini and obsohtschest wennoi Gigieni" (Messenger of forensic Medicine and public hygiene).

"Wratschebnija Wjedomosti" (Medical Paper).

"Lyetopissy Moskooskayo chirurgitscheskago Obtschestwa" (Annals of the Moskau Surgical Society).

"Ieschenrdjelnajaklinitschezkaja Gazetta" (Medical Weekly Gazette).

"Wratsch" (Physician), a journal which has a very large circulation.

"Medizinski Sborink Imperators kawo Kawkas kawo Medizins kawo Obschtschestwo" (Medical Messenger of the Imperial Kankas Medical Society).

DRUG FARMS.

In a recent issue of a prominent English medical journal there appeared a short notice on this subject, which we read with interest.

It is a well known fact that our country is over-stocked with physicians, hence we see so many young, bright, well educated and thoroughly competent doctors struggling and starving, almost, along the narrow, crooked and rugged path that leads to professional success. Some of these gentlemen possess, or at least, can command, some small amount of capital, and land, even near our large cities, somewhat remote from railroads, can be bought at a very low price and on very easy terms. There are many articles in our materia medica that can be raised in the climate of our country in the open air, and many others that could, no doubt, be successfully cultivated in hot houses.

The profit on drugs is very large, so that very little ground, if used at all successfully, would yield a very large revenue.

Would it not be well for some of our young men to turn their intelligence into this channel? Their leisure could be devoted to study, while they might be enabled to make a good living, at least until they had attained that *age* so essential to success in the practice of our profession, if they did not care to permanently engage in such a pursuit.

Notes and Comments.

To Detect Bacillus Tuberculosis, for Diagnosis.

Dr. Heneage Gibbes recommends, in the *Lancet*, the following process, which will bring out the bacillus with ease and certainty, and in his hands has never failed. The colors used are magenta crystals and chrysoidin; the latter is a brown, which does not stain the ground substance so intensely as vesuvin. They can be procured from the Badesche Anilin Fabrik, 22 Bush-lane, Cannon-street, E. C. The following are the formulæ he has used: Two grams of magenta crystals, three grams of pure anilin, twenty cubic centimetres of alcohol, specific gravity, 830, twenty cubic centimeters of distilled water. Dissolve the anilin in the spirit and then rub up the color with it, in a glass mortar, adding the spirit gradually until it is all dissolved; then add the water slowly, while stirring, and keep in a stoppered bottle. Make a saturated solution of chrysoidin in distilled water and add a crystal of thymol to make it keep; a dilute solution of nitric acid (Coml) is made, one part of acid to two of distilled water. For sputum the following process is the most simple. Spread a thin layer on a cover glass and let it dry; when quite dry pass it two or three times through the flame of a small Bunsen burner and let it cool. Filter two or three drops of magenta solution in a watch glass; place the cover glass with the sputum downward on the stain, taking care there are no air bubbles under it. Let it remain for fifteen or twenty minutes, then wash in the dilute acid until all color has disappeared; remove the acid with distilled water, when a faint color will return; then place the cover glass, in the same manner as before, on a few drops of chrysoidin filtered into the bottom of a watch glass, and let it remain a few minutes until it has taken on the brown stain; wash off the superfluous color in distilled water and place the cover glass in absolute alcohol for a few minutes; remove and dry perfectly in the air; place a drop of Canada solution on the cover glass and mount. It is better to use small glass funnels for filtering the stains, as they protect the fingers. Sections of hardened tissue are treated

in the same manner, with the necessary modifications. With regard to the powers required to examine these bacilli after they have been mounted by this process, an ordinary ¼ inch with daylight will show them perfectly, and a ⅛ dry glass will show that they are rows of spherical bodies, with the same illumination. Their diagnostic value remains to be settled.

Therapeutics and Physiology.

Dr. Geo. F. Yeo concludes an address in the *Lancet* on "Experimental Physiology and Practical Medicine," as follows:—

Rational therapeutics must grow out of physiological knowledge, as surely as a plant is the outgrowth of its roots. As the remote rootlets are the exact parts which are all important for the nutrition of the plant, so experiment feeds physiology, and thereby nourishes the art of medical practice. It would appear silly to ask to what rootlet any single fruit or flower on a widely-spreading tree owed its existence or nutrition, and so it is idle to expect that each, or even any, therapeutical agent or method of diagnosis should be traced to the definite experimental discoveries that may have led to its adoption or use. As the branches of our medical tree spread wider and wider, and its diagnostic flowers and therapeutic fruits become more and more numerous, we find that its physiological roots go deeper and deeper, in search of pabulum, and the experimental rootlets become still further removed from the more obviously useful and prolific part of the plant.

A New Remedy for Spasms.

The *Med. Central. Zeit.*, of July 15, 1882, publishes the result of experiments instituted by Dr. Schiffer, of Berlin, for the purpose of determining the therapeutic value of the *extract of Guachamaca*, a tree indigenous on the Apuche mountains. As a specific for all spastic conditions of the motor apparatus we so far possessed, in reality, one remedy only; curare, which, however, on account of its danger, and the uncertainty of its action, as well as of the remedy itself, has mostly been used for physiological experiments alone, and, perhaps, occasionally in tetanus.

Guachamaca extract, prepared from the bark of the Quebracho plant, which belongs to the same class as the Oleänder (Nerium ol. L.) and of which latter the skin between tree and bark is also poisonous, is a remedy which, while not so dangerous in its effects, is far more reliable and uniform in its action, and can besides easily be procured pure and genuine, and of always equal strength, as it is by no means rare.

Schiffer experimented with this drug, and made his observations in the clinic of Prof. Frerichs. He employed the remedy in solution, in the dose of ⅛ of a grain, and by the hypodermic method, in cases of tonic and clonic spasms of the muscular system, and always with a very good effect. He noted also that, administered internally, no matter in what solution, the drug was as little absorbed by the mucous membrane of the alimentary canal as curare is.

Should further trials with this remedy prove invariably as successful, or at least frequently so, as was the case in Schiffer's experiments, we would at last possess a reliable specific for all spasmodic affections of muscles and motor nerves, a drug, the physiological action of which would be exactly opposite to that of strychnine and similar remedies.

Turpentine for Tænia Solium.

In the *Southern Clinic*, Dr. H. L. Harris relates the case of a mulatto girl to whom he gave on a Thursday afternoon—

℞ Ol. terebinthinæ, ℥ss
Ol. ricini. ℥iss. M.

Sig.—Tablespoonful at a dose.

And directed that one dose be taken, and that the patient retire fasting, and await developments until one o'clock Friday.

At 12.20 o'clock, Friday, he was summoned, and found she had passed a monster tapeworm, measuring seventeen and a half feet in length, careful measurement. She suffered from soreness over the hepatic region, but the abdomen has fallen, and the patient feels well.

Tuberculosis of Urinary Apparatus.

Mr. Reginald Harrison reports, in the *Lancet*, a condition of affairs occurring in a patient in the Liverpool Royal Infirmary, to which the term "Urinary Phthisis" has been applied. He had seen a good many instances of it in hospital practice, the patients being usually sent there on the suspicion that they were suffering from stone. The symptoms of urinary tuberculosis so closely resembled those of stone that an examination of the bladder with the sound was unavoidable. Under all circumstances it was necessary that such an examination should be conducted with the greatest gentleness and delicacy. This condition consists essentially in tubercular deposits and ulcerations of the urinary organs, while similar deposits usually exist elsewhere throughout

the body. In connection with the diagnosis, Mr. Harrison directs attention to the great value of careful and continued thermometric observation. In the irritability which accompanies stone in the bladder and tumors, an evening rise in temperature is only met with under very exceptional circumstances, it cannot be said to be symptomatic of these affections; while in urinary tuberculosis it is constantly observed, and is to be regarded as an objective symptom of importance.

Paris Health Report.

At a recent meeting of the Soc. Méd. des Hopitaux (August 11th), M. Ducastel read the report on the reigning diseases for the second quarter of 1882. The mortality is much higher than that for the same quarter for several years past. Typhoid fever and diphtheria have cruelly stricken both the hospital and civil population. Pulmonary diseases have been more common and of greater gravity than usual. In the hospitals 378 cases of diphtheria have been received instead of 267 for the same period last year; in the city outside the hospitals 728 cases were reported, instead of 523 noted last year; the disease was of exceptional gravity, the mortality being as high as 70 per cent. During the month of June typhoid fever was exceedingly prevalent, and during the quarter 452 cases were received in the hospitals; in the city 192 deaths from this disease were reported, instead of 97 for the same period in 1881.

Therapeutics of Tetanus.

Dr. James R. Wallace furnishes, in the *Lancet*, statistics of tetanus in the Medical College Hospital of Calcutta, from which we note that after revising the notes in forty-six of the cases in which recovery took place, he fails to find one in which success can be attributed to any single remedy, or any individual plan of treatment, though in most of them chloral and cannabis indica were more largely used than other drugs. The practice in which surgical operations were performed for the relief of the sufferer has been attended with most unfavorable results. In two cases the sciatic nerve was stretched for tetanus arising from wounds of the foot; in one instance the median was subjected to the same operation, for disease originating in a comminuted fracture of the thumb, and in neither of these cases did abatement of the spasms or other improvement in the patient's condition attend the procedure. Amputation of the hand in two cases, of the forearm in three, and of the leg in two, was resorted to without effect. And he concludes that if any drugs are to be relied on, favor is decidedly on the side of chloral, opium in the form of morphia, and opium smoking.

Multiple Myom of the Neck of the Uterus.

On the anterior lip of the uterus of a woman, 49 years old, a tumor the size of a walnut, and on the posterior lip, one of the same character, of the size of a hazel nut, was detected. The case is reported by Dr. v. Rabenan, in the *Berl. Klin. Wochenschrift*, 1882, *N.* 11, and is especially interesting, as every indication pointed to a malignant growth, and only a trial excision proved the benign nature of these tumors, both being myom. For their radical removal the neck of the uterus was amputated.

Another point of interest in this case, and one which, under similar circumstances, may have not a little weight in deciding the diagnosis, is the fact, that the mother of the patient had been operated on several times, for submucous myomata, which in her case had all been provided with pedicles, and this had made the diagnosis easier. Such cases are, on account of their favorable prognosis, and because they might easily be taken, at the first glance, for malignant tumors, of great importance, a myom possessing sometimes almost the same hardness to the touch as a cancer.

Excision of the Tongue.

Mr. Croly, of Dublin, performs the following operation for cancer of the tongue, even when the disease is situated in the anterior portion of the organ. He first ligatures each lingual artery close to the hyoid bone, through a curved incision, reaching from the symphysis down to the hyoid bone, and up and back to the angle of the jaw. Through these incisions he withdraws the tongue, as in Regnoli's operation, and removes the requisite amount of it by the benzoline cautery. Lastly, he divides the gustatory nerve where it lies along the inner border of the jaw-bone.

Therapeutics of Chloral Hydrate.

In the course of an article on this subject, in the St. Louis *Medical and Surgical Journal*, Dr. Joseph E. Harris recommends chloral for seasickness, 15–20 grains every four hours; for the nausea and vomiting of pregnancy, in inflammations, eruptive fevers, etc., especially when at-

tended by adynamic symptoms; in cholera and cholera morbus, in nearly all nervous disorders, in delirium tremens, in puerperal eclampsia, in infantile convulsions, in tetanus, in whooping cough and spasm of the glottis, and concludes with the statement that hydrate of chloral is a nervous sedative, carminative, hypnotic, an antispasmodic, antiseptic, antiphlogistic, and we may say anæsthetic; but gives the following caution: It should be prescribed with the greatest caution, if at all, when there is ischæmia of the arterial system. It should not be prescribed, for instance, in pneumonitis, in which there is bound to be a great disturbance of the pulmonary circulation.

Stenography for the Blind.

Prof. Arnold, the Director of the Berlin Institute for the Blind, has at last succeeded in teaching stenography to the blind. He presented, in a meeting of savants, held in Berlin during last month, a boy, æt. 13, born blind, who was able to write a lecture down about as fast as an expert writer with the perfect use of his sight can do, when making use of common letters. He then read, just as fluently, what he had written. The lecture was on political subjects, and included a geographical description of Greece; for an expert stenographer with undisturbed vision, even, a rather difficult task. Herewith is, at last, solved a difficult problem. Prof. Arnold mentioned, also, that he found less trouble in teaching the blind this system than the common method of writing, and that especially a great deal of time was saved and a new source of income opened to those unfortunate persons who were born blind.

Rupture of the Uterus.

Dr. Macdonald presented to a recent meeting of the Toronto Medical Society (*Canada Lancet*) a uterus in which rupture had occurred during labor. The woman, a primipara, was unmarried, aged 26, and healthy. The pains were moderate. During the prevalence of a rather severe pain she felt something give way. The pain ceased, moderate hemorrhage occurred, and there was tenderness over uterus. Collapse rapidly set in, hemorrhage profuse. Examination revealed a rent in anterior wall of uterus, through which the hand readily passed into the abdominal cavity. Ether and ergot were given subcutaneously. Delivery was effected by turning. Child dead. The woman rallied somewhat, but died thirty-nine hours after the rupture. A large quantity of fluid extract of ergot and five drachms of ether and brandy were given subcutaneously. The rupture was seven inches long.

Subcutaneous Injections of Iodoform in Syphilis.

Dr. Thomann, of Graz (*Med. Wiss.*, Oct. 1881), has treated several cases of intense syphilis by hypodermic injections of iodoform, and generally after ten or twelve such injections, has obtained a notable amelioration of the symptoms. The preparation he uses consists of six parts of iodoform dissolved in twenty of glycerine; of this from five to twelve drops may be progressively injected. He has never observed an abscess, but slight swelling and pain may occur at the point where the needle penetrates. Iodine is detected in the urine within two hours after the injection, but no odor of iodoform can be found in the respiration, urine, or cutaneous perspiration. Dr. Thomann has also used a solution of iodoform in olive oil, but found it much more irritating than the other.

Ergotin for Prolapsus Ani.

A boy, æt 5., suffered two years from this complaint. After each act of defecation the bowel prolapsed, 5–7 ctm. The treatment instituted was first the usual one: cold effusions, cauterizations with nitrate of silver, the application of the tincture of the chloride of iron, and the internal use of tonics, besides regulation of the diet and attention to the secretions, especially preventing constipation. But the morbid condition continued more or less invariably the same. At last a suppository was made use of, consisting of ergotin, 2 to 3 grains, and of butyrum cacao q. s. The country practitioner who reports this case, in the *Arch. d. Pharm.*, June, 1882, remarks that the effect of this remedy bordered almost on the miraculous; after the application of a few suppositories, the ailment was cured.

Eczema and Vaccination.

Dr. J. Herbert Stowers reports, in the *Lancet*, the case of a child in whom eczema commenced at three months of age, in consequence of which vaccination was postponed. When two years old it was seized with confluent smallpox and only recovered to be permanently afflicted with terrible facial deformity. Five other members of the same family who remained in the house throughout this child's illness were unaffected. They had been successfully vaccinated. He furnishes this case as a warning to physicians not to allow eczema to stand in the way of vaccination.

Atropin for Dribbling from the Mouth.

Dr. G. F. Yeo says, in the *Lancet*, that often, in cases of paralysis, and sometimes in fracture of the skull, dribbling from the mouth is a most distressing symptom; it saturates the pillow and robs the poor patient of much needed sleep. A little atropin injected under the skin in the neighborhood of the gland, checks for hours the flow of saliva and enables the sufferer to enjoy a quiet sleep.

Over-distention of the Stomach.

Dr. Langmann reports, in the New York *Medical Journal*, the case of a man who was troubled with dyspepsia and occasional severe cardialgia, during which time the peristaltic action of the stomach could be plainly seen. The capacity of the stomach was five quarts; the introduction of a tube was invariably accompanied by vomiting. After once washing out the stomach, immediate improvement took place. There are several similar cases recently reported.

Special Reports.

NO. X.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.

(*Continued from page* 277).

Serious Effect of Calomel upon the Eye.

F. C. Hotz, M.D., of Chicago (*Archiv. Ophthal.*, Vol. XI, No. 1). In November, a railroad employé, aged thirty-eight years, consulted me for an affection of his right eye, which resembled, in every feature, an extensive burn of the ocular conjunctiva. The eyelids were red and swollen, especially the upper one, so much so, that the eye could be opened but very little. The conjunctiva of both lids were very red, succulent and roughened by enlarged papillæ. The retro-tarsal portions of the conjunctiva protruded in two thick, succulent folds when the lids were everted; and the ocular conjunctiva was also intensely red and swollen, so that its limbus projected considerably over the surface of the cornea. But what attracted my attention the most was a large, white crescent in the lower half of the ocular conjunctiva; its convex border reached down to the lower retro-tarsal fold; its concave border was parallel to and about 4 mm. from the margin of the cornea. The horns of this crescent extended upward around the sides of the cornea, and tapering off gradually, terminated in sharp points in the upper half of the eyeball. The surface of the crescent was markedly depressed below the level of the surrounding conjunctiva, and exhibited the whitish, dry, bloodless appearance of mortified tissue, which we usually find after a severe burn of the conjunctiva.

The lustre and transparency of the cornea were not disturbed; the iris, however, was discolored, the pupil was contracted, and dilated very irregularly, under the influence of atropia, on account of numerous fine synechiæ.

Upon inquiring into the origin of this peculiar affection, I received the following information: The patient's habits always had been very regular; he never had gonorrhœa or syphilis, and never had sore eyes.

The present trouble began two weeks ago, without any known cause, with swelling of the eyelids, redness of the eyeball, photophobia, profuse lachrymation, and some pain in and about the eye. He took some medicine internally (which, according to the prescription, contained quinine and morphine), but no medical application of any kind was made to the eye until two days ago. On that day his physician prescribed powdered calomel, which the patient's wife dusted into his eye by means of a camel's hair brush. He could not say how much calomel was thrown in the eye, but the application caused considerable pain, increased the flow of tears, and the tumefaction of the lids, and on the next morning his wife discovered on the eyeball a large white patch which, as she very positively asserted, was not there when she applied the powder on the preceding day. Under proper treatment, the iritis subsided quickly, and after the elimination of the eschar the extensive defect in the ocular conjunctiva was closed by cicatrization. At the expiration of three weeks the eye had recovered a normal appearance, with a regular and mobile pupil; the only evidence of the past trouble was a callous white scar in the ocular conjunctiva, below the cornea, with linear extensions around the sides of the cornea.

Remarks.—From the history of this case it is evident that originally the trouble was an acute iritis, with an unusual degree of chemosis. Upon a grave error in the diagnosis, calomel was prescribed, and its local application was followed by the lesion in the ocular conjunctiva so directly that the existence of a causal relation seems very probable. If the patient had been taking iodide of potassium, there would have been nothing remarkable in the unusually violent action of the calomel; for we know that under these circumstances it is converted into iodide and bichloride of mercury. But, as the patient had only taken a quinine mixture, I suspected the calomel was not chemically pure, the more so, as it was not

obtained at a first-class drug store. The chemist who examined the calomel for me reported the presence of considerable free hydrochloric acid; and to my further question as to the chemical changes such calomel might possibly suffer in contact with the lachrymal fluid, he replied that at the temperature of the human body chloride of sodium can convert a little calomel into bichloride of mercury, and that this alteration is greatly favored by the presence of free hydrochloric acid. The production of corrosive sublimate, of course, explains the caustic effect. When the calomel was dusted in the eye, I think the cornea was probably turned upward, and the powder was sprinkled on the lower portion of the chemotic ocular conjunctiva, and afterward rubbed into it by the pressure and movements of the swollen eyelids. This would account for the fact that the cornea escaped unscorched, and that the caustic action was most severe upon the more dependent portion of the ocular conjunctiva.

Two Cases of Malignant Tumor of the Sphenoidal Cavities, Implicating Vision.

(*loc. cit. p.* 52) Julian J. Chisolm, M.D., Baltimore. Within eighteen months two cases of malignant disease, supposed to have originated in the sphenoidal cells, have come under my observation, making four cases of this serious lesion which I have seen in the past ten years. In both of these last cases the disease seemed to have started on the right side of the bone, at the base of the skull. The eye complication was recognized as of post-ocular origin, and the lesion was located about the Sella Turcica, on account of the ophthalmoscopic appearances of the discs and the disturbed action of the eye muscles. In both cases the left eye became secondarily involved, both as to the functions of the optic nerve and the action of the muscles moving the eyeball. In each case the nose implication was subsequent to the eye trouble. The first action of the growth in its malignant development was to invade, by bone expansion, the optic foramen at the apex of the orbital cone, and impress the structures passing through this opening, then slowly involving contiguous parts, until both sides of the skull about the median line became affected. In both cases progress was slow, requiring many months for development. In each, treatment was unavailing to stop the steady growth of the disease, until one succumbed to the general poison, and in the other, life seems to be rapidly ebbing away amidst severe torture, which morphia in large doses and frequently repeated can scarcely mitigate. One case was in a boy 7 years of age, the other in a member of the medical profession aged 37 years.

While the two cases have this in common, viz., a malignant growth at the base of the skull, destroying sight, then developing in the direction of the face, filling the eye sockets, pushing out the eyeballs, invading the nares, and exhibiting a striking similarity in the disfigurement produced, there are symptoms peculiar to each. The youth suffered no pain whatever when the disease was making rapidly fatal progress; the older patient, on the contrary, has suffered severely from the very beginning of his trouble, and the intense agony of his every-day life has shown no mitigation. The younger case commenced with nausea and vomiting, with headache, before any other symptoms could be detected. When attention was called to the eye, for the rapid deterioration of sight, the cerebral symptoms of nausea and headache suddenly passed away. They did not return, although for sixteen months the disease, in its anterior development, filling up the face cavities with its cancerous growths, steadily progressed to a fatal issue. In the elder the nausea with vomiting appeared among the last symptoms, when sight had already been nearly destroyed, and when prominent growths were developing in the temple and in the roof of the mouth. In both cases the mind remained clear throughout. In both the disease extended from the right to the left side. In neither case was there any general paralysis nor any evidence of extensive encroachment by the growth in the direction of the cranial cavity. The loss of smell was secondary to that of sight in the youth, while it was retained in the older case, even when the disease had invaded the left orbit and had reduced vision in this eye to recognition of large objects, sight in the right having been utterly destroyed by pressure on the optic nerve. The youth suffered from an external squint with ptosis, the older with internal squint followed afterward by ptosis. In both the drooping of the lids of each eye became prominent.

A little more than a year after the time of the boy's first visit to Dr. Chisolm, he received a letter from his family physician, announcing the death of the boy. From this letter the following extracts were made: "Death apparently came from exhaustion and septic poisoning. The eyeballs protruded excessively, in hideous deformity. Bleeding, fungous masses protruded from each nostril, and also could be seen behind the palate. These emitted a most offensive odor.

His hearing was only implicated a few days before his death. The most wonderful part, to me, was the total absence of all pain. I was not able to make a *post-mortem* examination."

Tumor of Lachrymal Gland.

By Joseph A. White, M.D. (*loc. cit. p.* 62).

As tumors of the lachrymal gland are not very common, these few notes from my case book, in relation to the successful removal of such a growth, may be of some interest.

Mrs. E. Pye, a German lady, 60 years of age, has had a gradually increasing swelling at the outer part of the left upper eyelid, for more than a year. Of late its increase has been more rapid, the eye being pushed down and toward the nose, so that it is now (May 1, 1881), difficult to close the lid over it. At times the eye is quite painful and tender to the touch, is inflamed, and has a constant muco-purulent discharge. V = $\frac{20}{200}$ both eyes, with + $\frac{1}{8}$. R. V = $\frac{20}{20}$ with + $\frac{1}{10}$. L. V = $\frac{20}{50}$. Ophthalmoscope shows left optic nerve to be quite reddened, with hazy outline and large tortuous veins.

The case was evidently one of lachrymal gland tumor. On May 13th I removed the tumor through an incision made along outer third of edge of orbit, just below the brow. It was dissected out with probe-pointed bistoury and scissors. It was firmly attached above to the periosteum and below to the conjunctiva, and extended far back into the orbit, pressing upon the optic nerve. It was removed intact; was ovoid in shape, measuring one and a quarter inches in its length, and three-quarters of an inch in its transverse diameter.

Very little bleeding followed the operation. The wound was closed by stitches, leaving a small drainage tube at outer angle.

Though there were considerable ecchymosis and swelling of the eyelids and cheek, it healed kindly, and required little after treatment. Three weeks later it was entirely healed; the eye had returned to its position, its movements were free, the vision the same as before the operation, and the lid drooped slightly.

It is now six months since the tumor was removed, and the most careful examination can detect no signs of a recurrence; the eye and lids are perfectly normal, both in appearance and motion, and the vision has improved to $\frac{20}{20}$ with + $\frac{1}{10}$. My friend, Dr. Swan N. Burnett, of Washington, D. C., who, during the meeting of the American Medical Association, had examined the case, requested me to send him the tumor for microscopical examination when I should remove it. I sent him the specimen, and am indebted to his kindness for the following description of the tumor:—

Microscopic appearances, by Dr. Swan M. Burnett, Washington, D. C. The tumor is far from uniform in its histological structure. The connective tissue element is rather abundant in some parts, while in others it is very scant or entirely wanting. The cellular element, which is largely predominant, is likewise irregular in its distribution. It consists of rather large, round cells, with very thin cell walls, and large, granular nuclei. There are other cells, smaller, with small or no nuclei, which are distributed in somewhat large collections throughout the tumor mass. The characteristic form of myxomatous tissue is seen in abundance in all parts of the specimen. Cylinders and alveoli lined with cells in the characteristic arrangement of adenoma are met with, particularly near the centre of the section, passing through the tumor in a transverse direction. The remains of those structures are quite abundant, but in only one or two places have I been able to find them entirely intact and in anything like a normal condition. The alveoli are often filled with a hyaline mass (Becker), less frequently with round cells or granular matter.

From these appearances I think we are justified in describing the tumor as a myxo-adeno-sarcoma. From an examination of this specimen alone it would not be possible to trace a general history of such tumors, but it tends to confirm the opinion of Becker* that all the forms of tumor of the lachrymal gland hitherto described are but different stages of the same morbid growth. It seems likely that they all begin as adenomas and that the various forms of degeneration—myxomatous, sarcomatous, colloid, encephaloid, etc., come on later. The appearances in this specimen differ from that of Becker's in this, that the degeneration was greatest toward the periphery, while in his the periphery appeared the more nearly normal.

Systematic Report on the Progress of Ophthalmology During the Third Quarter of the Year 1881.

By H. Magnus, M.D., *Archiv. Ophthal.*, Vol. xi, No. 1, under the head of General Ophthalmological Literature.

W. Sykes. *Clinical note and remarks on a Disease of the Eyes Peculiar to Colliers* (*Brit. Med. Journal* xlii, p. 77, July 16, 1881). The sight first fails in bad light, and grows gradually worse, till the pupils are dilated

* Weber, das Adenom der Thränendrüse. Bericht über die Augenklinik der Wiener Universitat, 1863-65.

and insensible to light, and only a perception of light remains, while nystagmus is well marked. Recovery takes place on exposure to light and air, without other treatment. The miners attribute the disease to bad light given by the safety lamp, but Sykes believes it to be toxic, from gases accumulating in the pits.

Fialkowsky. Ueber den Einfluss russicher Bäder auf das gesunde und kranke menschliche Auge. (*On the influence of Russian baths on the healthy and the diseased human eye.*) Wratsch, 1881, No. 9. The influence upon diseased eyes is greater than on healthy eyes. After the bath the pupils are somewhat dilated, or react sluggishly; both the far point (?) and the near point are slightly removed from the eye; the range of accommodation is, therefore, somewhat diminished. Visual acuteness suffers no change. Moreover, after the bath, conjunctival and retinal hyperæmia occurs; the secretion of mucus and tears becomes increased. Any inflammations present are intensified.

Gunn, R. M. *On the Continuous Electrical Current as a Therapeutic Agent in Atrophy of the Optic Nerve and in Retinitis Pigmentosa* (*Roy. Lond. Ophth. Hosp. Rep.* vol. x, pt. 2, p. 161, June, 1881). 1. In optic atrophy, Weiss' continuous current battery (the Foreaux-Smee; the elements are zinc and platinized silver), of 25 cells was the instrument used. The positive pole was placed on the closed eyelid, and the negative applied to the supra-orbital region, the top of the spine, and to a point just behind the mastoid process, in order to determine which position gave the greatest light impression. Five or seven cells were only employed at first. The supra-orbital region was the point selected in the majority of cases. The position of the poles was changed during the sitting, which lasted from five to six minutes. Of the eighteen cases thus treated, six improved, four were doubtful, and eight did not improve, or grew worse. Two of the six cases which improved returned some time afterward, with their sight as bad as before, and did not improve under further treatment. No really conclusive results were obtained, because of the smaller number of the cases, and the fact that this was not the sole method of treatment, as iodide of potassium, or strychnia, or other nerve tonics, are noted as having been given in all the cases but one.

Gunn considers, nevertheless, that when we compare the above results with those obtained where no galvanism has been employed, there must be a strong presumption in favor of its utility in certain cases. He is skeptical of the efficaciousness of iodide of potassium, and looks upon strychnia and the other nerve tonics as possibly of some use when combined with good food. He gives an analysis of the cases with reference to the question of prognosis, and the conclusion he arrives at is, that "he should give the most favorable prognosis when the patient is young or middle-aged, with recent failure of sight and present ability to count fingers, at least. Color-perception is possibly defective. The disc is white, but the large vessels are of normal size. There is no history of severe injury to the brain or spinal cord, but perhaps there are symptoms of locomotor ataxy.

Retinitis Pigmentosa.—Of the value of galvanism in this disease Gunn speaks hopefully. He reports four cases, in each of which there was a decided improvement. In case 1, the patient's condition on admission was, right eye, V = fingers at 3; left, V = $\frac{20}{70}$ with 36; and when discharged; right, V = $\frac{20}{70}$ nearly; left, V = $\frac{20}{40}$ nearly. Gunn refers to the literature of the subject, and draws attention to cases reported by Neftel and Dor, in which there was marked benefit by this treatment. He considers that the continuous current is capable of stimulating the conductivity of the optic nerve, both as regards the electrical current and the current originated in the impression produced upon its end-organs by means of light, and that this counteracts the degeneration of the nerve tissue which follows the absorption of light by the pathological pigment deposits. The defective blood supply also tends to produce further degeneration, and possibly galvanism has a temporary effect in dilating the blood-vessels, and so improving the nutrition of the tissue.

The caution to be observed in using the remedy is to begin with a weak current of five or seven cells for a short time, and then gradually increase if necessary.

(While observing the caution Gunn has just named, and after using the constant current in the same manner he has indicated, *i. e.*, as regards the position of the poles, I have, in specific paresis of the pupil and the forms of "neuritis optici," usually following these pareses, had decidedly satisfactory results in the way of making cures. I now consider electricity as an indispensable therapeutic agent in ophthalmology. With the positive pole on the closed eyelid, the negative pole on the top of the spine, I seldom employ more than five to six cells, and rarely excite more than the blue (weak) light impression, and if improvement be characteristic the light impression will change to white and yellow. T.)

The Laws of Inheritance in Relation to Disease. Lecture IV, delivered by Jonathan Hutchinson, at the Royal College of Surgeons of England. (*Medical Press and Circular*, Vol. XXXII, p. 22, July 13th, 1881.)

In his fourth lecture on "Laws of Inheritance," *Jonathan Hutchinson treats of heredity of retinitis pigmentosa.* It rarely appears at birth, though he believes the tendency to it to be present, but shortly develops and increases with age. Consanguineous marriages tend to strengthen the predisposition to the disease, and Liebreich has found it to be very common among Jews. Retinitis pigmentosa is allied to certain forms of choroiditis and to disease of the optic nerve. In retinitis pigmentosa the choroidal structure is interrupted and the retina is gradually obscured by a dense pigmentary deposit. The vessels shrink, and when once the series of events is established, it pursues a certain and inevitable course to the end. He then refers to the tendency of defects of the optical structure of the eye to be transmitted and become hereditary, and quotes cases in point, *e. g.*, myopic families. He further says: functional changes once duly fixed by pathological changes are transmitted from individual to individual, and that which at the outset ranked only as an idiosyncrasy may by and by develop into a determined disease. An instance of this is afforded by a form of amaurosis due to the excessive tobacco smoking, the tobacco here acting not as the actual producing cause of the disease, but as an excitant of the tendency to defect when once originated.

Correspondence.

Medical Legislation.

Ed. Med. and Surg. Reporter:—

In a recent number of the Reporter you favored the profession with a few very valuable "Hints Concerning Medical Legislation;" and as these apply specially, no doubt, to the profession in Pennsylvania, a few additional remarks may be useful. We must educate ourselves; and we believe that a much larger space should be given to this subject in our medical journals. At the same time we must educate our legislators and the people; and this can be done best through memorials, correspondence and our daily newspapers. The school is large and there are in it many dull scholars. The teaching thus far may not have been the best, but we have made progress. Nearly every practitioner in the State has registered, under the recent act of Assembly.

The failure of the committee appointed by our State Medical Society to secure the passage of an act to provide for a State Board of Health has restricted the committee on medical legislation, appointed by the same Society, to a kind of legislation which has necessarily in it the elements of weakness. A standing argument against the establishment of a Board of Health has been the creation of a new office, to be filled by partisan influence. The Committee on Medical Legislation understand this subject quite well, and have not been disposed to ask for a Board of Medical Examiners for the State, as this would give rise to another office or bureau, to be filled in a similar manner. Moreover, it is agreed by these committees, that there is really no necessity for two boards; and further, that the efforts of the profession should be centred upon one object, the organization of a State Board of Health, with authority to supervise the registration of medical practitioners. To *load down* a measure of this kind with the minutia of registration may not be politic, and hence a supplement to the present registration act has been prepared, transferring the duties now imposed upon the faculties of our medical colleges, to a Board of Health.

The registration act referred to (see Reporter, June 25th, 1881), is *prospective* in its leading features, and if we should not be able to secure the passage of a supplement, it will produce good results in the counties in which the profession take an interest in its enforcement. A grand jury cannot object to registration; it will be more difficult to stop a bogus diploma man, or a non graduate who has been in the continuous practice of medicine since 1871. A retroacting law, which would cut off ten per cent. of the present practitioners, even if it could be passed, would be inoperative, without authority vested in a board of health or some other body of men to enforce it.

At the bottom of this whole subject is the fact that our government does not favor a high standard in the profession. The independence of the States prepares the way for sectarian medicine, and for any number of chartered medical schools of low grade. A half-dozen pretentious men, without education and without money, can obtain a charter for a medical school in any of our States, and do a thriving business. We have some, I fear many, such institutions in our country, and hence we are brought to the conclusion that the degree of Doctor of Medicine can no longer be taken as conclusive evidence of fitness to practice medicine. A license issued by a competent board of examiners has become a necessity.

Carlisle, Pa. R. L. Sibbet, M.D.

News and Miscellany.

Proposed International Hygienic Convention.

Dr. L. de Csatary proposed, at the late Geneva Congress, the formation of such a convention, for the purpose of securing uniformity in national legislation affecting the public health. It is suggested that an international committee of surveillance should be created to secure the observance of such hygienic measures as might be adopted in common by the various nations leagued together. A committee was appointed to present the matter in due shape to the next congress, at the Hague.

American Academy of Medicine.

The seventh annual meeting of the American Academy of Medicine will be held in the Hall of the College of Physicians, Thirteenth and Locust streets, Philadelphia, on Thursday, October 26th, at three o'clock, P M. The President, Dr. Traill Green, of Easton, Pa., will deliver an address at 8 P.M., Thursday, at the College of Physicians, to which the medical profession is invited.

RICHD. J. DUNGLISON, *Secretary.*

John Hunter.

Dr. Oliver Wendell Holmes pays the following tribute to John Hunter: "A great comparative anatomist, a great physiologist, the creator of a vast museum, the author of innumerable original observations of interest to medical science, a surgeon of distinction, a man of powerful native genius, insatiable in thirst for knowledge, indefatigable in accumulating it, his works have been treated as quarries by those who came after him, as the Coliseum was used to build up palaces for the Roman nobles of later ages."

A Rescue Boat Race.

We learn from the *Lancet* that at the late Clevedon regatta, a novelty was introduced in the shape of a "Rescue race." The idea was originated by Dr. Richardson, F.R.S., who is staying at Clevedon, who gave the first prize, of $5 00, Mrs. Richardson giving the second, of $2.50. The whole of the competing boats had to be stranded high and dry upon the beach, and at a given signal the men had to get them launched, and then proceed to try to pick up one or two objects, representing drowning men floating about three-quarters of a mile out in the bay.

Items.

—The Very Rev. Dr. Egan has been appointed Rector of the Catholic University, and a Fellow of the Royal University of Ireland.

—Dr. Strange, the President of the British Medical Association, has been elected an honorary member of the Société Française d'Hygiène.

—From the *British Medical Journal* we learn that, from the annual report of the receipts and expenditures of the City of London, just published, it appears that the cost of entertaining the members of the International Medical Congress to the *conversazione*, last year, in the Guildhall, amounted to $10,495.

—In the *Wiener Med. Wochenschrift*, No. 35, Dr. Ludwig Klaar reports a fatal case of perforation of the œsophagus, due to a wood-shaving having become impacted in the gullet at the level of the bifurcation of the trachea. The thoracic aorta was eaten into, and this led to the man's death by profuse hemorrhage.

—The municipality of Turin lately opened a competition for the best treatise on hygienic science as applied to the requirements of rural districts. The prize has been awarded, by the jury charged with the decision, to Dr. Layet, professor of hygiene at Bordeaux. It consists of a sum equal to about $500.00.

OBITUARY NOTICES.

WILLIAM PIERSON, M. D.

Dr. William Pierson died at his residence in Orange, N. J., Oct. 1st, in the eighty-sixth year of his age. He was born in 1796, was graduated from Princeton College in 1816, in the same class with the late Bishop McIlvaine and ex President Maclean, of that college, and began the practice of medicine in 1820. He belonged to a family of physicians, comprising his grandfather, Matthias Pierson; his father, the Hon. Isaac Pierson, for some years a member of Congress; himself, and his son, William Pierson, Jr., all of Orange. He was for thirty years the Secretary of the New Jersey Medical Society, and afterwards its President, and at the time of his decease was the oldest physician of the State. During his long life he was prominent in public matters, as well as his profession, having been a member of the New Jersey Legislature between 1835 and 1840, and from 1849 to 1852 Sheriff of Essex county, in which office he was succeeded by his brother, Edward Pierson, and the first mayor of the city of Orange.

—Dr. Frazer, ex-member of the Canadian Parliament and a prominent physician, of Welland, Ontario, is dead.

QUERIES AND REPLIES.

In reply to query of "J. N. R., Pa.," in your issue of May 6th, 1882, as to whether any of your readers ever heard of twins living to maturity and both having families. I would say that in my practice there are *two* families having twins grown up, all four of whom have children; are healthy and prolific. R. B. E.

McKnightstown, Pa.

MARRIAGES.

BAILEY—BANCKER.—On Wednesday, Oct. 4th, at the residence of the bride's parents, No. 430 Clinton Avenue, Brooklyn, by the Rev. Emory J. Haines, Fred. D. Bailey, M.D., of New Milford, Penn., and Margaret M., daughter of William D. Bancker.

BALLANTINE—WALKER.—On Wednesday evening, Oct. 4th, by the Rev. H. L. Duhring, Rector of All Saints' Church, at No. 1700 S. Tenth street, C. Hamilton Ballantine, M.D., and Miss Clara A. Walker, both of this city.

CORRY—CORTELYOU.—In Brooklyn, Oct. 3d, by the Rev. Henry A. Davenport, of Bridgeport, Albert M. Curry, M.D., and Phebe D. Cortelyou, both of Brooklyn.

GRIFFITH—JENKS.—On Thursday, October 5th, in the Woodlands Presbyterian Church, Forty-second and Pine streets, by the Rev. Dr. Benjamin Griffith, assisted by the Rev. Dr. Crowell, Dr. J. P. Crozer Griffith and Julia E., youngest daughter of Barton H. Jenks, all of Philadelphia.

HARVEY—GREEN.—At East Orange, N. J., Oct. 3d, 1882, at the residence of James C. Bayles, by the Rev. Alfred Yeomans, D.D., Katharine Green, daughter of the late Edward Green, of New York, and Dr. Thos. W. Harvey, of Orange, N. J.

NILSEN—WHITTEMORE.—In New York, on Tuesday, Oct. 3d, at the residence of the bride's parents, by Rev. Dr. William M. Taylor, Jonas Rein Nilsen, M.D., and Laura, daughter of Thomas W. Whittemore.

DEATHS.

ANDERSON.—At Kingston, N. Y., on Saturday night, Sept. 30th, Dr. Wm. C. Anderson, of Staten Island.

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Communications.

SANITARY AND OTHER FEATURES OF THE HUMIDITY OF HEATED AIR.

BY THOS. S. SOZINSKEY, M.D., PH.D.,
Of Philadelphia.

The disturbing influence of atmospheric vicissitudes on the system is, both directly and indirectly, a potent cause of disease and death. Direct and clearly manifest effects of it are observable in the marked prevalence of inflammatory affections of the chest, in winter, and of diarrhœal affections in summer; and those of gradual onset or of an indirect character, are doubtless quite as important, though not very obvious. In the so-called temperate zones of the earth, it would seem that multitudes are almost inevitably doomed to succumb to "stress of weather," to use an expressive nautical phrase. It is, perhaps, impossible to entirely prevent harmful perturbations of the system of such origin. Due regulation of the clothing, and mode of life in general, is, of course, powerful for good; but all efforts to withstand and to shun external conditions of a nature prejudicial to health are far from being perfectly successful.

Of the various expedients resorted to for the purpose of circumventing special harmful atmospheric vicissitudes, or conditions, it is more than probable that some are not free from harm in themselves. Certain changes produced in air artificially heated is one of these, and to it the remarks which succeed will be devoted.

Heated air, in its various aspects, is so extensive a subject, that I will not attempt to do more at present, than speak of some features of its humidity or degree of moistness, a matter to which little study is given, although it assuredly merits the attention, not only of physicians, but of people in general.

The hygrometric condition of the air and its variations, even apart from their effects on the economy, are indeed somewhat abstruse matters, but not to such a degree as is generally supposed, certainly not so markedly so as to be beyond the comprehension of any one almost, who really wishes to understand them. A careful perusal of the remarks I shall make below will, I believe, enable one to gain an insight into most of the chief features of them, besides their bearings on health, which are of interest to the physician and sanitarian.

It is hardly necessary to say that the atmosphere consists essentially of nitrogen, oxygen, carbonic acid and aqueous vapor. The proportion of each of the first three ingredients or constituents of it is nearly always and everywhere the same—a given amount of it contains about 79 parts of nitrogen, nearly 21 of oxygen, and about .04 part, or 4 parts in 10,000 of carbonic acid; but the proportion of the last, in a given amount of it, varies very much. The possible amount of aqueous vapor present depends on the temperature. When the temperature is high, much more may be present than when it is low. Thus a cubic foot of air, at a temperature of 90°, may contain over fifteen times as much as the same bulk at a temperature of 5°, an enormous difference.

In this connection it is expedient and well, I think, to give the following useful table, showing

the possible amount of vapor present in a cubic foot of air at different temperatures:—

Temp.	grs. of vapor to c. f.	Temp.	grs. of vapor to c. f.
0	.78	45°	3.64
5°	.93	50°	4.28
10°	1.11	55°	5.02
15°	1.32	60°	5.87
20°	1.58	65°	6.87
25°	1.87	70°	8.00
30°	2.21	75°	9.31
32°	2.37	80°	10.81
35°	2.62	85°	12.53
40°	3.09	90°	14.50

When a given amount of air of a certain temperature contains as much moisture as can possibly be present without precipitation, it is said to be saturated. Now, taking the amount of moisture present when the air is saturated, to be represented by 100, the degree of saturation, or, in other words, the relative humidity may be expressed in parts of 100. Thus, as a cubic foot of air at 70°, when saturated, contains 8 grs., if there are only 4 grs. present in it, the degree of saturation, or relative humidity, is indicated by 50. Then, of course, if the relative humidity of air, at a temperature of 70°, is, say 75, it contains 6 grs. of moisture to the cubic foot. Evidently, if the temperature and relative humidity are given, it is easy to calculate the precise amount of moisture present in a cubic foot of air, when a table of the possible amount present at different temperatures is at hand; all that one has to do to determine it, is to multiply p, the possible amount present, by r, the relative humidity, and divide the product by 100, or the amount of moisture present in a cubic foot is $= \frac{p \times r}{100}$.

I need not explain at length how to determine the relative humidity. It is sufficient to say that to do so, it is necessary to have a hygrometer, say Mason's (the one in general use), an instrument by which the difference between the actual temperature and the temperature at which the air should be so as to be saturated with the moisture present in it, or at the dewpoint, is indicated. This difference being known, the relative humidity is found by referring to a table, the nature of which I need not explain. The hygrometer consists essentially of two thermometers placed on a rest at a distance of two inches or so from each other, the bulb of one of which is covered thinly with a cotton wick, which is kept moist through imbibing water from a cup or other vessel placed near by. Being neither expensive nor hard to operate, it should be in more general use than it is. The absence of it, even in hospitals, schools and such institutions, indicates how extremely few are alive to the value of it.

To any one who has carefully read what precedes, it is evident that if air is artificially heated, the relative humidity of it must necessarily be altered. Thus, if the air of a room the relative humidity of which is 50 be raised from a temperature of 30° to 70° the relative humidity will then be 14.8. Here the problem runs thus: If air of a temperature of 70° contains 1.185 grains to the cubic foot, what is its relative humidity? The answer is obtained by dividing p, the possible amount of moisture present at 70° (8 grs.) by a, the actual amount present (1.185 grs.) and 100 by the quotient or the relative humidity is $= \frac{100}{p \div a}$.

Now, if in a room we have 1000 cubic feet of air, the temperature of which is 25° and the relative humidity 50°, and we raise the temperature to 70°, how much moisture must be added in order to have the humidity still at 50? The answer is 3.065 grains to the cubic foot, or 3065 grains in all, which is 6.73 fluidounces, the weight of an ounce of water being taken at 455 grains. Then, of course, if the 1000 feet of air were changed hourly, it would be necessary to have 161.5 ounces or about five quarts of water evaporated every twenty-four hours.

Again, if in a house we have 20,000 cubic feet of air, the temperature of which is 25° and the relative humidity 50, and we raise the temperature to 70°, how much moisture must be added in order to have the relative humidity still at 50? The answer is 61,300 grains or 134.7 fluidounces, which is somewhat over four quarts. Then, of course, if the 20,000 feet of air were replaced hourly, it would be necessary to have 3232.8 ounces or about 25 gallons of water evaporated daily.

If the temperature be as low as 10°, and of a humidity of 25, the air of a house of a capacity of 30,000 cubic feet, heated to 75°, and rendered of a humidity of 60, would call for the evaporation of 5.3 grs. to the cubic foot, or nearly 11 quarts in all. Then, of course, if the 30,000 feet be replaced hourly, the evaporation of 264 quarts or 66 gallons would be needed every 24 hours.

Evidently it would require a large pan and a high heat beneath it to evaporate sufficient water to properly hydrate the air of a large house the temperature of the air of which is kept at 75° on a frosty day. The little pan which may or may not be found in connection with a heater

would be of little value; it would require over a hundred such to serve the purpose.

In order to gain even a moderately correct idea of the amount of moisture which must be added to the heated air of a house so as to keep it at a reasonable degree of humidity, it is necessary, among other things, to form an estimate of the amount of air which should pass through it during a given length of time.

Now, to arrive at even a moderately correct conclusion as to the amount of air which should pass through a house hourly, or daily, it is necessary to be aware of the number of inmates, and also of any other source of contamination of the air, such as the burning of gas, which are present.

Although there is sufficient reason for holding that a person should have 3000 cubic feet of fresh air per hour, the amount one contaminates through the breath and otherwise, to a really injurious degree, may be set down at 1000 cubic feet per hour. The amount of carbonic acid given off by the lungs alone of an adult being about 5 per cent. of the 15 cubic feet consumed by such a one, on the average hourly, or $\frac{3}{4}$ of a foot per hour, would consequently be sufficient to cause nearly 5 parts to the 10,000 of it to be present after a person had been in an air-tight room containing 1000 cubic feet for an hour—a proportion of it, whether of itself or of the organic matter which accompanies it, which would cause lassitude and other undesirable effects. Dr. Parkes regards more than 6 parts in 10,000 as decidedly too much.

If two persons are in a room of a capacity of 1000 feet, it follows from what has just been said that all the air within it should be replaced every half hour; and if four are present it should be replaced every quarter of an hour—a thing which can hardly be done without causing injurious drafts. With the contamination caused by the skin as well as the lungs taken into account this estimate is low.

The air of a room may, under favorable conditions, be changed three times per hour, but it is unusual, I believe, for it, in one of a capacity of say 3000 feet, one 17.33 feet in length, the same in breadth and 10 feet in height, to be replaced even hourly; and rarely is any great effort made to ventilate any room to meet the requirements of the number of persons present—a very serious sanitary dereliction.

Taking a heated room of a capacity of 2000 cubic feet, the air of which is replaced about hourly, and in which there are four persons, let us consider some of the hygrometric features of it in detail. Now, if we take the temperature of the external air to be 35° and the humidity 70—the average temperature and humidity from the first of December to the end of March, at Philadelphia—and the temperature of the air within to be 70°, it would be necessary to have a pint of water evaporated hourly in order to keep the humidity at about 65—a fair degree of humidity when the temperature is 70°. Now, as the amount of moisture exhaled from the four persons present may be placed at four ounces per hour—a low estimate undoubtedly, when the air around is dry and warm—the amount to be supplied by artificial evaporation is reduced to three quarters of a pint hourly. If no moisture be evaporated artificially the degree of humidity would be nearly 34. If the air without be of a temperature of 35° and of a humidity of 70, when heated to 60°, the humidity would be about 27. If an addition of 4 ounces be made to every 2000 feet, the humidity would be about 40. With a temperature of 70° and a humidity of 34 it would be necessary to evaporate about 11 ounces of water in order to bring the humidity of 2000 feet of air up to 65; and with the temperature at 60° and the humidity at 40 it would be necessary to evaporate about half a pint in order to bring the humidity to 65.

It appears, then, that even if a room of a capacity of 2000 feet contains four persons and has a complete change of air only once every hour, if the temperature is kept at 65° and the humidity at 70, it is necessary to evaporate a large amount of water in order to keep the humidity at 65.

A fact worth noting here is, that sometimes, in a badly ventilated room in which there are many persons, the degree of humidity may be high even if no moisture be added artificially. Thus, in a room the air of which is changed once every hour, and in which there is a person to every 200 cubic feet of its capacity—an allowance which is not reached in some schools and other institutions—the air without being at a temperature of 50° and of a humidity of 70, and the air within at a temperature of 65°, its humidity will be about 83.

From what has just been said, it follows that the amount of moisture which should be added to the air of a heated room when unoccupied, to have it at a proper degree of humidity, may be uncalled for when a number of persons have been present for awhile. It is wrong, then, to go on supplying the same amount of moisture to the air of a room regardless of the number of its occupants.

In this connection it is proper to state that the moisture which is supplied artificially to the air of a house should, as a rule, be supplied to each room according to its requirements. This should be done through an evaporator, or some special arrangement by which evaporation can be facilitated. Supplying the moisture to a whole house through an evaporating pan placed in a heater, is a very unsatisfactory plan, for, unless the temperature is at the same degree in each department, the degree of humidity varies. Thus, if a sufficient amount of water be evaporated in this way to keep the air of a room in which the temperature is 70° at a humidity of 65, the air of a room in which the temperature is 60° would be far too damp, it would be almost saturated.

In a room the air of which is kept warm through a heater or other ordinary means, it usually happens that the temperature is very unequal in different parts of it, and the same must be at least equally true of the humidity. Thus, while the temperature close to the register is over 100°, it may be under 60° at points distant from it, and at least an equally marked difference of humidity is inevitable. The due regulation of the humidity of such a room is an absolute impossibility. And are not the majority of rooms such? It is unfortunate that any room should be such, but more especially a large one, in which many assemble, as a schoolroom.

The difference in the temperature, as well as the hygrometric condition of different parts of a room heated artificially, depends greatly on the character of the walls, and the facility with which currents of air may both escape and enter, but greatly also on the temperature of the air at the source of heat. When the temperature of a large room is kept up through the entrance of heated air, there should be more than one place for it to enter; there should be many; and, in case of any room, it is wise to have a large volume of air of a moderate temperature to enter, rather than a little only at a very high temperature.

Now, as a matter of fact, one feels warmer in a moderately moist than in a very dry air, of any temperature. Very dry air, especially when warm, tends greatly to cool the body, by inducing speedy evaporation–a chilling process. Air of a temperature of 60° and of a humidity of 80 feels warmer than air of a temperature of 70° and of a humidity of 40. From this, and the fact that when a room is occupied for a little while the relative humidity is increased, it follows that the temperature should be reduced somewhat after occupancy.

The statement made above, that air of a temperature of 60° and of a humidity of 80 feels warmer than air at a temperature of 70° and of a humidity of 40 is one which I desire to emphasize. The truth of it admits, of course, of experimental demonstration; but it can be equally as well shown, mathematically. This I will do, taking into consideration only the impression produced on the system by each quality of air through respiration, what is true of it being more emphatically true of that produced through the skin.

Now, it is necessary to premise that the specific heat of air is .237, that a cubic foot of air of a temperature of 60° weighs 536 grs., and one of air at 70° weighs 526 grs., that there are 7000 grs. in a pound. that 966 heat units (the unit of heat is the amount required to raise one pound of water one degree) are necessary to evaporate a pound of water, and that exhaled air may be taken as of a temperature of 90°, and of a humidity of 100. In passing through the lungs. the amount of heat necessary to bring a cubic foot of air at a temperature of 60° and of a humidity of 80 up to 90° and to the point of saturation, is .544 heat unit, or $30° \times \frac{536}{7000} \times .237$; and as the evaporation of the 10.234 grs. of moisture necessary to produce the equalization in moistness calls for 1.412 heat units, the whole amount of heat abstracted from the system in the process is 1.956 heat units. Again, in passing through the lungs, the amount of heat necessary to bring a cubic foot of air at a temperature of 70° and of a humidity of 40 up to 90° and to the point of saturation, is .356 heat unit, or $20° \times \frac{526}{7000} \times .237$; and as the evaporation of the 11.65 grs. of moisture necessary to produce the equalization in moistness calls for 1.608 heat units, the whole amount of heat abstracted from the system in the process is 1.964 heat units, which is .008 heat unit more than in the former case.

If the degree of humidity is productive of decided effects on the economy in health and disease, the considerations which precede would seem to indicate that heating the air we breathe may be a source of harm. That the degree of humidity has much influence on the system, cannot be doubted; and that it is, under ordinary circumstances, as injurious when very low as when decidedly high, is, perhaps, equally certain. No doubt very dry warm air has a deleterious effect on the functional action of the skin and other parts. The unpleasant effects of it

on the eyes is familiar to every one. But the direct constitutional injury which may be produced by it is probably less in importance than the injury produced indirectly, though being markedly unlike the external air. One who enters or leaves a room the air of which is very warm and dry, on a cold day, sustains a more or less violent strain of different functions. As every one must move in and breathe the air out of doors, it is wise not to render it injurious by living habitually in a very unlike artificial atmosphere. Better to rely to a considerable extent on regulation of the clothing, than to raise the temperature of the air artificially to a high figure.

It has been affirmed that an addition of moisture to heated air is simply not wanted. This comforting conclusion is supported mainly by two reasons, to wit, that organic matter is removed speedily, and is uninjurious in proportion to the degree of dryness of the air, and that as expired air is always of a temperature of about 90°, and saturated, the impression on the system, so far as the humidity is concerned, when unheated, is essentially the same as when heated.

Now, these reasons are unsatisfactory. Little or much organic matter is expected to be present in the air of an inhabited room, according as it is or is not properly ventilated, and it is unlikely that any which may be present would be rendered more injurious within both a reasonable length of time and a reasonable degree of humidity. The statement that the air issues from the lungs at the same temperature and humidity, whether it is cold or warm, may be true, but even if a like impression were produced on the lungs by air of any degree of humidity when unheated as when heated, there is a difference of impression made on the surface, and through it on all parts of the body, which is of great significance. Then the state of the air without, as regards humidity, is not always the best. It may not be wise to keep the humidity of heated air very high, but assuredly it is also unwise to keep it very low. It is well to keep it at a moderate degree.

It being so difficult to keep the humidity of highly heated air at a proper degree, it is judicious, for this reason alone, to be satisfied with a moderately low temperature, to let it be, as a rule, from 60° to 65°. Especially is it wrong to have the air highly heated when the weather is very cold. The sensation of heat and of cold being to a great extent relative, the temperature of the air within should be regulated somewhat according to the temperature of the air without, unless a person is in it constantly. In truth, the craving for very warm air is induced largely by inactivity and habit. One can easily render himself chilly in air at 70°, by exposing himself awhile to air at 80° or 90°.

RIGIDITY OF THE OS UTERI.

Read before the Burlington Co., Medical Society, October 10th, 1882.,

BY WILLIAM H. SHIPPS, M.D.,
Of Bordentown, N. J.

Not the least among the many operative causes tending to retard or make difficult the act of parturition, may be mentioned "Rigidity of the Os uteri." This complication of labor may be dependent upon one of several factors; namely: Nervous or vascular excitement, induration of the os uteri, scirrhous or carcinomatous condition of the cervix, or entire obliteration of the cervical canal.

Examples of the first class are not infrequently met with, and, as a rule, offer no permanent barrier to the final successful consummation of labor. The other varieties, on the contrary, though of rare occurrence, act as formidable obstacles to the free passage of the child, and almost invariably necessitate the intervention of art.

Illustrative of one of the last named varieties, I ask the attention of the Society to the following case recently occurring in my practice.

At daybreak on the morning of August 17th, 1882, I was called to attend a Mrs. C., 42 years of age, of good physique, in her thirteenth labor. It may be well to mention the fact that I had attended the woman on two former occasions, the last being in July, 1881, at which time she was delivered of twins at seven months; the cause of this premature delivery was malposition of the placental mass, which almost entirely occluded the mouth of the uterus. Delivery was accomplished with difficulty, the woman being almost exhausted by the profuse hemorrhage. Fortunately, however, she made an excellent recovery, and was spared to figure in a different rôle the year following.

On my arrival at the house at this, her last labor, I was informed by the nurse that she had been in pain since midnight, and that they had summoned me on account of the increasing severity of the pains, and as they supposed, the probable speedy termination of the labor. At this time the pains were of moderate severity, and occurring at intervals of five or ten minutes; the mouth of the womb was dilated to the extent of about one inch in diameter, waters presenting,

through which the finger readily detected the head of the child occupying the third position of the vertex. On making the examination, I was struck by the peculiar conformation of the uterine orifice. Instead of the natural elastic feel characteristic of the normal condition, I noticed that the anterior and posterior lips, throughout their entire extent, appeared to be in a state of hypertrophy, forming a well defined band or ring of hard, inelastic, cartilaginous tissue, so unyielding in its nature as to preclude the possibility, as I thought, of its being overcome by natural causes. This hardness, though general, was more pronounced at a point commencing at the superior portion of the left lateral division of the os, and terminating at a corresponding point on the under or inferior surface. Besides this abnormal hardness, there was a want of uniformity in the contour of the uterine mouth, its edges being rugged, uneven and nodulated, probably the remains of old cicatrices resulting from lacerations in former pregnancies.

After assuring myself that no apparent progress was being made, I left her, to return at 10 A.M. Examination at that hour showed that no perceptible advance had been made. I made repeated attempts at dilatation, by means of the fingers, but with indifferent success. At 12 o'clock the waters ruptured spontaneously, the head still being high up in the pelvis. I then began the use of chloral, giving thirty grains in all, during the next two hours. At 4 P.M., no advance being evident, I called Dr. H. H. Longstreet in consultation, who confirmed the diagnosis, and agreed with me that, as the woman's physical condition was yet good, and she evidently possessed considerable reserve force, little would be lost by waiting a few hours longer, at the expiration of which time, if no improvement were manifest, incision of the uterine orifice would be made, with the hope of finally overcoming the obstruction. I visited the patient just before midnight, and found that relaxation was commencing at the right superior portion of the mouth. Before returning home I authorized the nurse to send for me immediately if my services were necessary. I was called at 5 A.M.; pains had increased in severity, with slight advance of the head, and the mouth of the womb relaxing throughout its entirety. At 7 A.M., a strong expulsive effort brought the head into the world. By this time the woman was pretty well worn out and had to be strongly urged to her duty. Despite my utmost efforts, some fifteen minutes elapsed before the body was born. The child was dead, finely developed, and weighed 13½ pounds. A few moments later I attempted the removal of the placenta, but found that I could barely touch its border with my index finger. I waited an hour, meanwhile practicing the so-called method of Crédé, and, as I supposed, that of every one else, without making the least impression.

The intervals of my attempts were filled in by efforts at restoring my patient to a state of consciousness, who about every ten minutes would fall into a condition of syncope. Finally, by way of complicating matters still further, she went off into a convulsion, which happily was of short duration. Concluding that a speedy termination of the labor was now indicated, I brought the woman to the edge of the bed, and introducing my hand into the uterus found the placenta high up in the womb and firmly adherent three-fourths of its extent; carefully breaking up the adhesions, I was successful in removing it entire. Examination now showed that nature had accomplished her end, not only by a gradual softening down of the hardened tissue, but had actually forced asunder the unyielding band, lacerating it, at several points, without seeming harm to the woman, as the sequel showed. The woman made a speedy and satisfactory recovery.

In reviewing this or analogous cases, the following questions might very naturally suggest themselves:—

1. What part do nature, venesection, chloral or other drugs and dilatation, play, in overcoming the obstruction?

2. When is operative interference necessary or justifiable?

3. The method of interference.

With regard to the first, I am fully persuaded in my own mind, that nature alone, in the case just cited, was the active and controlling agent in overcoming the difficulty. Venesection, medicines, and digital dilatation, though of unquestioned benefit in the ordinary forms of rigidity, are in these cases not only useless, but of positive harm, serving only to depress and harass the already exhausted woman. At times the power of nature in overcoming mechanical rigidity is simply wonderful; and yet, while accepting the truth of this proposition, we are not to suppose for an instant that our duty is simply to watch the gradual development and beautiful unfolding of nature's processes. The strength of the woman must be sustained at all hazards; lose sight of this, and nature sinks, helpless before her task. This we can accomplish by means of the free exhibition of nourishing food, than which there is nothing better than beef tea,

milk and coffee, preferably the latter, and if occasion requires, brandy. The condition of the bladder and bowels must not be overlooked. But suppose that nature fails, then we come to consider our second query—

When is operative interference necessary or justifiable?

This question is not so readily answered. Whenever the condition of the woman is such as to lead to the belief that longer delay will undoubtedly imperil her safety, the time has come to interfere. What, then, are the indications pointing to this end?

So long as the woman's condition, as manifested by the pulse, skin and tongue, is good, wait!

If the cervix shows signs of yielding, wait!

If the pressure of the child's head upon the soft parts of the mother be not sufficiently great to jeopardize their integrity, wait!

But suppose the woman shows unmistakable evidence of exhaustion; the pulse is irritable and weak and increased in frequency, there is hemorrhage, attacks of syncope, or convulsions, fears are entertained lest harm may come of the continual pressure of the child's head; then the time for waiting has passed, and that for action is at hand. This brings us to a consideration of the last question:—

How shall we interfere?

The operation is unattended with pain, easily performed, and comparatively harmless. The patient is placed upon her left side, or back, and brought to the edge of the bed.

During the absence of a pain the index finger of the left hand is carried to that portion of the os uteri intended to be incised; the flat surface of a probe-pointed bistoury or hernia knife should be passed along the palmar aspect of the finger, to the required length, the knife is then righted, and a sawing motion is made from within outward and upward; some insignificant hemorrhage usually follows, but rarely gives rise to any serious embarrassment. The best and safest sites for operating are the lateral sides or the under border of the orifice; three incisions, as a rule, are all that will be required, while in not a few cases one or two will suffice. During the passage of the child these incisions will probably be somewhat extended; when the operation is performed imperfectly or too early, this accident will invariably follow. It must be admitted that the operation of incision, like every other surgical procedure, has its opponents as well as its advocates; among the former appearing the names of such distinguished authorities as Goodell and Albert Smith, of our own countrymen, and Baudelocque, Dubois, and Madame La Chapelle, abroad. Some of these authors enthusiastically proclaim dilatation by means of the colpeurynter of Braun, or the rubber bags of Dr. Robert Barnes, to be the remedy or agent par excellence for overcoming the non-spasmodic form of rigidity, and as emphatically protest against the use of the knife in these cases, as rendering the patient liable to serious laceration of the uterine body, with septic absorption as a probable sequence.

In answer to these objections, it is only necessary to state the familiar fact, that in almost every normal labor, particularly that of primiparæ, laceration more or less extensive occurs, followed only in rare instances by evidence of septic poisoning. Again, the forcible dilatation of any structure, especially if the operation be performed with any degree of rapidity, is necessarily always attended by a break in the continuity of the muscular fibres, if not actual laceration of the tissues involved. This I claim follows every attempt at dilatation of the os uteri, whether the force applied be a natural or artificial one; dilatation is, therefore, not exempt from the very dangers it pretends to avert. I am not to be understood as advocating the operation of incision in all cases of physical rigidity, but only when, after allowing nature a fair trial, she is found unequal to the task before her. It was my intention to consider in detail the other varieties of uterine rigidity, but fearing to trespass upon your time to that extent, I have postponed their notice until later.

NOTES ON HEADACHE AND SICK HEADACHE.

BY G. C. SAVAGE, M.D.,
Of Jackson, Tenn.

Through the kindness of Dr. Nicholls, of Philadelphia, and Dr. Taylor, of Corinth, Miss., I have had the pleasure of reading the "Notes on Headache," by S. Weir Mitchell, M.D., published in the REPORTER, Feb. 6th, 1875, one of the numbers to which my unnamed friend in Texas called my attention in a late issue of the REPORTER. I have not been able to procure the number issued Aug. 1st, 1874. If my Texas friend will be kind enough to send this number to me, I will appreciate the favor, and will return the journal and cost of sending.

I cannot infer the object my friend had in view in calling my attention to the "Notes" of Dr. Mitchell, unless it was that I might see that

the theory I had claimed as my own, by right of discovery, had been advocated by Dr. Mitchell eight years ago. I naturally sought anxiously for the journals containing Dr. M's. notes, that I might see what this man, for whose medical lore we all have the greatest respect, had written on sick headache. Although I have not seen the journal published Aug. 1st, 1874, I infer from the one published Feb. 6th, 1875, that in the former he had written nothing indicating that he had entertained any views, as to the causes and cure of sick headache, coinciding with mine as published in the REPORTER of July 29th, 1882, since he, in his February "Notes," after stating in his first paragraph that he would now consider "some forms of this disorder [headache] which are either undescribed or ill-described," says, in the beginning of his second paragraph, "and first as regards the headaches of some eye strain." Further on in the second paragraph he says that he stated in his paper published Aug. 1st, 1874, "that astigmatism, disorders of accommodation of the eye, and defects of power to converge or diverge, the optic axes, are alike the causes of *head pains;*" but he does not say that in that paper he thought that *sick headache* depended on these causes; and certainly he does not teach this doctrine in his February "Notes," before me.

The "Notes" by Dr. Mitchell are worthy of greater consideration, doubtless, than they have received. The history of his lawyer patient ought to be republished and read by every physician in the world; for perhaps, every physician living has had, has now, or will have, just such cases; and without the correct knowledge obtainable from Dr. M's. account of this case, such patients would go on suffering in their vocations, or be driven by their pains from their chosen professions. Medicines will never cure such patients, nor can residence by the sea, combined with rest from labor, do more than give temporary relief. There is but one cure, and that is properly fitted glasses. The headache (not sick headache) from which Dr. M's. patient suffered so much was dependent on compound hypermetropic astigmatism, which was corrected by proper glasses, fitted by Dr. Thomson, of Philadelphia, a perfect and permanent cure resulting.

Dr. Mitchell gives the histories of other cases, in his February notes, which I believe would read differently had he sent them also to Dr. T., for no doubt (judging from the histories given) errors of refraction predisposed them to, and near work excited, their attacks of headache (not sick headache). I have had similar cases, to whom, only a few years ago, I would have administered bromide of potassium, and directed out door exercise and freedom from close work, in whom I found hypermetropia or astigmatism, the correction of which with a properly fitted glass, cured them speedily and thoroughly. In every one of my cases among school children who complained of terrible headache on close application, the causing hypermetropia was latent and became manifest only after the use of a 1 per cent. solution of atropia in the eyes. I have the records of several such cases, but will briefly note only two of them. No. 1, a boy, aged 12 years. During vacation he has always been free from headache, and up to the time he entered school he had suffered none from headache. Always within two or three days after entering school his headache would come on; and as long as he continued in school his headache would continue—never a day of freedom from it. A vacation of only a few days would bring relief which would continue until school duties had been resumed. The boy's not complaining when he had nothing to do but to play, almost made his parents believe that his complaint when studying was assumed. When his father consulted me about him he said "I wish you would examine my boy and see if you can find any cause for his headache that seems to torment him so. Always when we start him to school he begins to complain, and sometimes we are forced to stop him." The history I gathered from the boy and his mother led me to believe that the cause of his malady was some error of refraction. I tested his vision and found it in each eye equal to $\frac{20}{xx}$, *i.e.*, at a distance of 20 feet he could call letters made to be seen at that distance. Apparently he had perfect sight; but it was only made so by continuous tension of the ciliary muscles, for, on paralyzing these with atropia, I found his vision for right eye $= \frac{15}{cc}$ and vision for left eye $= \frac{12}{cc}$. A + 16 was given him for O.D. and a + 14 for O.S., these glasses correcting in full the existing errors of refraction. His headache vanished, and he is now able to study as hard and as long as any one, without the least inconvenience. He is no longer a dull boy. His cure was instantaneous and complete. To see well when the axes of his eyes were parallel he had to strain almost as much as a person with perfect eyes would have to strain when the axis of his eyes converged to a point 12 inches from him; so we see that my patient had to doubly strain to read. His was not sick headache, but one of that class of headaches about which Dr. Mitchell so ably wrote.

No. 2 was a little girl, æt. 12 years: always harassed by headache of greater or less severity, according to application when in school. She came to me, July 4th 1881, for relief. To her I was able to make the declaration that henceforth she would be independent of headache; for I expected to fit her with glasses that would bring her relief. Her vision for right eye, ciliary muscle active, was $= \frac{20}{xxx}$, astigmatism causing the manifest defect; while her vision for left eye was $= \frac{20}{xx}$. After paralyzing her ciliary muscles and dilating her pupils, I found the vision of right eye $= \frac{10}{cc}$, and that of the left eye $= \frac{5}{cc}$. A + 10 gave her vision for left eye $= \frac{20}{xx}$, and a + 12 ⊂ + 60 cyl. ax. 75°, gave her vision for right $= \frac{20}{xx}$. These glasses she has been wearing, for near work only since she was fitted, and she has been perfectly free from headache during the whole time. Her history, before she was fitted with glasses was very like that of case No. 1. Rest from school duties would have given her temporary relief, and bromide of potassium would have lessened her suffering for a time, but the only thing that could ever have given her perfect immunity was a full correction of the errors of refraction in her eyes. Only two nights since she said to me "I would not take the world for my glasses and be compelled to do without them."

I could multiply notes of cases of headache like the above, all corresponding to the cases noted by Dr. Mitchell in 1874 and 1875, but I will close this article by giving the history of one case of *sick headache*, a malady different from *nervous headache*, so-called, though dependent on the same causes, and so common that a history of an attack need not here be given.

SICK HEADACHE.

The patient whose history I am about to relate, in support of my theory for sick headache, published in the REPORTER, July 29th, 1882, had her eyes refracted by me about eight months ago, without any knowledge on my part that she had ever had an attack of sick headache, and without her ever having thought that her severe and frequent attacks of sick headache in any way depended on the condition of her eyes. She had just passed through an attack of typhoid fever, and had been so reduced by the fever that her ciliary muscles could act but feebly, even after she had been convalescent some weeks. While convalescing her vision was $= \frac{20}{xxx}$, and at times not even that good; but when well, the power of the ciliary muscles having been fully restored, her vision was $= \frac{20}{xx}$. She stated to me, however, that it now tired her much more to read than formerly, and that my statement, made to her while she was convalescing, viz., that she was far-sighted, was, perhaps, true. She had me to examine her eyes, under the influence of atropia, when I found the vision of her right eye $= \frac{20}{1xx}$, and that of her left eye $= \frac{20}{0}$. Her latent hypermetropia had been made manifest by the use of atropia. A + 42 gave her perfect vssion in her right eye, and a + 36 brought about the same desirable result in the left eye. After getting her glasses she wore them constantly until about four weeks ago, when she had the misfortune to break them. The comfort she had derived from their use had been so great, she wrote me, saying, "I am lost without my glasses, so please get me new ones as soon as possible." I went about complying with her request, still ignorant that she had ever been a sufferer from sick headache. My opticians in Philadelphia had to shape the lenses to fit her frames, so that about ten days passed by before she received her new glasses. In this short interval, though she used her eyes as little as she well could, she had a very severe attack of sick headache, an attack of which she herself declares she had not had during the whole time she had worn her glasses. She further stated to me, only a few days ago, that before I refracted her eyes she had an attack of sick headache almost every week of her life. Her relief is certainly a propter hoc and not a post hoc. This case is a strong link in the chain of evidence which will soon place my theory beyond doubt. I have other links in preparation, and will soon add them to the chain.

Again, I earnestly solicit the observations of others.

HOSPITAL REPORTS.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINICAL LECTURE BY FRANCIS DELAFIELD, M.D.,
Adjunct Professor of Pathology and Practical Medicine.

Bright's Disease.

GENTLEMEN:—This is a man thirty-five years old, a boatman by occupation, who was admitted to the hospital two months ago. He says that in the course of his occupation he has been a good deal exposed to cold and wet, but he always had good health until two years ago.

Then, after taking cold, he had œdema of the feet and legs, and he noticed also that he passed a large amount of urine frequently. He had no vomiting, no headache, no disturbance of vision. This first attack of œdema of the legs lasted five weeks, and it incapacitated him from work. This condition gradually disappeared, and be-

tween this time and two weeks before his admission to the hospital he was perfectly well. Although two weeks before his admission he was perfectly well, still he was passing a large amount of urine. Then he took cold, and had another attack of œdema of the legs and feet, and this time the legs and feet reached a large size. The scrotum also was swollen, and he had an attack of acute bronchitis. When he was admitted to the hospital he was passing over 100 ounces of urine in the twenty-four hours, without any diuretic. The specific gravity of the urine was 1.015; it contained albumen and a few hyaline casts. There were no other symptoms. Since his admission, two months ago, he has gradually been improving, though there is still some œdema of the feet and legs, and he is constantly passing a considerable amount of urine—about 100 ounces in the twenty-four hours. The specific gravity is now 1.027. At the last examination there was no albumen or casts present. Here is a specimen of the urine which he passed during the past twenty-four hours. You will observe that the color is not perfectly normal, that it has not the clear, well-marked color of normal urine.

On looking at the man you see that he does not look badly. There is hardly any œdema of the feet and legs at the present time. The heart's impulse is somewhat diffused, so that it is difficult to place the apex. It is displaced a little to the left, as I judge from the stethoscope. There is no murmur. The patient says he has had constitutional syphilis.

That is the history of the case. Of course, many of you would say the man has chronic Bright's disease, or chronic diffuse nephritis; but the question is, what particular variety of chronic diffuse nephritis has he? I hear some one say "atrophic kidney." There is a good deal to be said in favor of its being atrophy of the kidneys. The large amount of urine that he is passing, the long continuance of the disease, the hypertrophy of the left ventricle, all of them point to the existence of atrophic kidney. But those are not the only elements in the case. The amount of urine that he is passing—over 100 ounces every day—is rather large, even for atrophic kidneys to pass a long while. Patients with atrophic kidneys will pass that amount for some time, but it is a good deal for them to pass all the time. Then, besides, you will observe that the one symptom which he has had besides the change in the urine is œdema of the legs. Now, dropsy is one of the least frequent symptoms that belong to atrophic kidneys. I do not mean that there are not plenty of cases of atrophic kidneys in which there is dropsy, but usually it is not the only symptom. If the patient has atrophic kidneys and has dropsy he will usually have some other symptoms besides. It is not often you have dropsy as the first and only symptom. And you will observe that that one symptom has troubled this man, and nothing else. Then, besides that, we cannot neglect the fact that the man has suffered from constitutional syphilis. So that, although it is possible that he has had atrophic kidneys, yet I think there is something else which may also suggest itself as being perhaps more probable.

"The large white kidney." If you should simply say the large white kidney, it would hardly apply. "The large white kidney of the diffuse variety." You mean chronic diffuse nephritis, and the large white variety; that would not apply in general. That is, the ordinary examples of the large white kidney would not give you such a history. But there is one particular form of the large white kidney which might give such a history; that is, the so-called waxy or amyloid kidney; that form of chronic diffuse nephritis in which the gross appearance of the organ is that of the large white kidney, and in which the tufts of the malpighian bodies and the walls of the blood-vessels are infiltrated with the so-called amyloid or waxy material. There is no absolute certainty, but the probabilities are that in this case the diagnosis would lie between these two conditions, between the simply atrophic kidney and the so called waxy kidney.

But here, again, there comes in another element of uncertainty, and that is, that it is perfectly possible, although it is not very common, for a patient to have, at the same time, the atrophic kidney and the waxy kidney. All the waxy kidneys are not of the large, white variety. A man may have a kidney which has the ordinary appearance of the atrophic kidney, and the blood vessels may be the seat of waxy infiltration, and when that is the case you will get a history a good deal like the history of this man. The probabilities are that this man is suffering from one or the other forms of waxy kidney; that he has either the large white kidney with waxy infiltration of the arteries, or the simple atrophied kidney with waxy infiltration of the arteries. There is one part of his history, however, which does not belong properly to the waxy kidney at all. that is, the high specific gravity of the urine. You will observe that its specific gravity is between 1.015 and 1.027, the latter being the specific gravity at present, although he is passing 100 ounces daily. That is certainly not characteristic of either the large white kidney or the atrophied kidney, or of any of the forms of waxy kidney. But in spite of that, I think we will have to accept this high specific gravity as an accident in this particular case, and not be influenced by it in making a diagnosis of the disease.

Now as to the prognosis and treatment. The treatment is, practically, the being quiet in the hospital and getting better. The man has been improving since he came in; he will probably soon be well enough to go out and attend to his business again; how long it will be before he will have another attack we can hardly tell, probably not as long as the interval between the first and the second attack; it is hardly probable he will again go two years without another attack; probably next fall the œdema will again return. I do not know that there is any special advantage which can be gained by his following out any treatment during the interval. He will, of course, protect himself against exposure to cold and wet; he should avoid the habitual use of alcohol; he should take as good care of himself as he can, with the idea of putting off a recurrence of the attack as long as possible, but a recurrence at some time

or other is pretty sure to come. I should rather hope, in his particular case, that he would escape until next fall, but it is very likely that we shall at that time see him again.

Case 2.—This patient is a man, thirty-two years old, who was admitted to the hospital over two weeks ago. The history was, that three months before the time when he was admitted he noticed that his feet and legs were becoming œdematous, and that at the same time he had ascites, the dropsy of the peritoneum coming first, and that of the legs and feet coming afterward. This dropsy has continued up to the present time. He has been tapped three different times. He passed his urine frequently and in small quantities. He has had no headache, and he denies having used alcoholic liquors. At the time when he was admitted there was a good deal of ascites, and there was œdema of the legs, feet and scrotum. The heart was pushed up by the fluid, as was also the liver. The specific gravity of the urine was 1.016, it contained albumen, and epithelial and granular casts. The man suffered a good deal from dyspnœa, apparently due to the pressure of the fluid. After his admission to the hospital the urine was passed in quantities from 45 to 15 ounces, and for some time lately the daily quantity has been small, from 20 to 15 ounces.

Two weeks ago his abdomen was tapped and 545 ounces of serum were drawn off. The dyspnœa, the nausea and vomiting which he was suffering from before the tapping, were relieved, and the amount of urine excreted was then increased. He did pretty well for several days, when the fluid began to reaccumulate, and the amount of urine passed during the twenty-four hours began to decrease, and so he has been going on, up to the present time. Yesterday his urine was of a specific gravity of 1.016; it contained albumen, granular and hyaline casts, and in quantity about twelve ounces. He was well until three months before coming into the hospital.

On looking at the abdomen, you notice that it is swollen, and that the cutaneous veins are distinctly increased in size. When we tap the abdomen with the finger we get the characteristic wave of fluid without any trouble. There is flatness on percussion as high up as the third rib on the right side. This, of course, means that the liver is pushed up by the fluid; that shows that the yielding of the diaphragm in this particular case has been greater than the yielding of the abdominal walls. You will find a difference in this respect in different cases of ascites. In some cases of ascites the abdominal walls yield to the pressure of the fluid a good deal, and the diaphragm yields comparatively little; in others the yielding of the abdominal walls is not as marked, and the diaphragm yields a good deal, being pushed upward into the thoracic cavity. This is evidently the case with this man. The abdomen is very tender; I presume he has some chronic peritonitis, and it is not worth while to distress the man in trying to feel the lower edge of the liver. There is very little doubt but that it is above the free border of the rib. I presume that it is a small liver pushed upward. The splenic dullness I cannot make out, because the liver and intestines are pushed up over the region where the spleen should be, and besides that the man is exceedingly sensitive.

We have, then, at the present time, marked ascites, tenderness over the whole of the abdomen, the liver pushed away upward, and you will observe, from the appearance of the man's face, that his general nutrition has suffered very much. He is very much emaciated; his whole condition is exceedingly bad.

Well, that makes up the history of the patient, and the question is, what disease or diseases is he suffering from? "Cirrhosis of the liver." I think there is no question but what he is suffering from cirrhosis of the liver. What else? He has some kidney trouble in addition to his liver trouble; now, what is it? "Cirrhotic kidney." Yes, the so-called cirrhotic kidney; the atrophic form of chronic diffuse nephritis.

You observe that the cirrhosis of the liver in his case is giving trouble in two ways: In the first place, it is producing dropsy to a very marked extent. He has a great deal of fluid in his abdominal cavity. The dropsy in his case is a very prominent feature, and a very serious feature, but in addition to the dropsy you will observe the man's appearance; look at the color of his face and the emaciation of the face and neck. All this is hardly to be explained either by the dropsy or the complicating chronic diffuse nephritis. How can we explain it? "By the presence of chronic gastritis." The only evidence we have of chronic gastritis is nausea and vomiting, and the fact that chronic gastritis is very common with cirrhosis of the liver. But you will observe that the nausea and vomiting in his case seem to depend more upon the pressure of the fluid than upon the condition of the stomach. After he has been tapped the nausea and vomiting are very much better, and they return again after the fluid reaccumulates. Chronic gastritis alone ought not to make such a looking patient as we have here.

"Functional disease of the liver." Yes; that the cirrhosis, in addition to producing dropsy by mechanical pressure upon the portal vein, has caused a change in the substance of the liver, which has so interfered with its functions that the man's whole nutrition has suffered in this way. That is the ordinary explanation of this condition, and I think it is sufficient, here, that the man's whole nutrition has been suffering, and is suffering now to a very great extent, because the liver ceases to perform the functions of the normal liver. It is impossible for the nutritive processes to be carried on properly unless the liver is performing its function properly; and there are a considerable number of cases of cirrhosis of the liver in which, in addition to the dropsy, we have this disturbance of the functions of the liver very marked, and when that is the case we get just such a looking patient as you see here—patients who look almost as if they were suffering from malignant disease.

I forgot to show you his urine. You will now observe that it is higher colored than it should be; that it looks as if it had blood in it, but the microscopical examination shows no blood, nor do chemical tests show the presence of any biliary

coloring matter, so that I presume the color is due to the presence of the coloring matter of the blood, without the existence of any blood corpuscles. We sometimes do have urine colored in this way.

Case 3.—Here is a boy twenty-two years old, who was admitted to the hospital nearly a month ago. He had been sick three months before he was admitted to the hospital, and the first symptom which he noticed was dropsy of the feet and legs. The dropsy extended up from the feet and legs, and became general. At first the urine was diminished in amount, but afterward the quantity increased and continued at about the normal. He has had no headache, no disturbance of vision. When he was admitted to the hospital he was still suffering from general anasarca. There was no headache, no vomiting. He was passing twelve ounces of urine in the twenty-four hours, of a specific gravity of 1.026; it contained fifty per cent. of albumen, and also granular and epithelial casts.

The patient was put upon the use of warm baths every second day, and under this treatment his urine increased in amount up to from 50 to 80 ounces. He was also taking a diuretic in addition to the general bath, and the dropsy steadily diminished.

The patient was doing well and passing large amounts of urine until four days ago, when the dropsy began to return and has continued up to the present time. The urine again diminished in amount, the hot water baths were resumed, but the œdema increased somewhat again. Yesterday he passed about twenty-eight ounces of urine. Bitartrate of potash was the diuretic given.

Here you have a very straight-forward history indeed; a much plainer case than either of the other two cases which you have seen. You have a young man who dates his whole trouble back about four months ago, and the first thing that he noticed was that he was becoming dropsical, that there was œdema of the feet and legs, and that he was passing less urine than he should. The dropsy continued up to the time of his admission into the hospital, about three months, and it still existed as well marked general anasarca. At that time he was passing only about twelve ounces of urine daily, of specific gravity of 1.026, and containing 50 per cent. of albumen, and also containing granular and epithelial casts. As an effect of treatment the urine was increased very much in amount, so that now, instead of passing twelve ounces in the twenty-four hours he passes over one hundred ounces, and the dropsy then decreased. But he still has considerable dropsy, and the increase in the flow of urine is no longer having the effect to reduce the amount of dropsy, which it should have. Except for the dropsy, there have been no symptoms; the man has had no disturbance of the stomach, his color is fairly good, his lips are almost as red as they ought to be; I think there is no heart trouble. There is, however, a not very loud murmur at the base of the heart with the first sound, which is probably a blood murmur. The heart is not increased in size.

Now, as said, there is a very straightforward history of disease of the kidney of some kind. "The large white kidney." Yes, that particular variety of chronic diffuse nephritis. You could hardly have a more straightforward history of a case of that particular form of chronic diffuse nephritis. It is characteristic in every respect.

Now, as to the prognosis and the indications for treatment. With regard to the latter, the one indication is to get rid of the dropsy. The dropsy is the one thing that troubles him. You will observe that, at first, increasing the amount of urine had its proper effect upon the dropsy; that the dropsy diminished while the urine increased. But at the present time this effect has ceased; he passes nearly double the amount of urine that he ought to pass, and yet the dropsy has persisted, so that evidently we are not affecting the dropsy in this way. The use of the hot baths and the diuretics which should increase the flow of the urine are not getting rid of the dropsy. When a patient behaves in this way, and when he is still in as good condition as this young man is in, the indications are usually to stop the use of the diuretics and to use iron in some shape or other, for when you find that increasing the amount of urine has no effect upon the existence of the dropsy, it is evidence enough that there is no particular use of going on stimulating the kidneys and making them constantly pass more water than normal, when the dropsy continues, or increases just as it did before. So that while you may well enough continue your attention to the skin, continue the hot water or hot air baths. It is better at once to stop the internal diuretics and to commence with one or the other preparations of iron. If the case is not of very long duration, as is the case with this young man, you will often get good enough results from these means. If it was an older case, if this boy had been sick a year, or two years, instead of three months, then I should think it made very little difference what you gave him. These older cases of the large white kidney, when they exhibit the particular combination of an increased amount of urine with increasing dropsy, go on to do badly, no matter what you do. You can take this as a pretty good general rule, that in a case of large white kidney, over a year old, in which the patient has the combination of an increased amount of urine with increasing dropsy, the patient will not get better, but will continue to get steadily worse. But in the early period of the disease, when the symptoms have existed only a few months, then the condition of things is not as bad, and it will be possible enough for this young man still to get better, although he has this combination of dropsy and a large amount of urine.

The Absurdity of Anti-Vivisection.

The absurdity of the English law against vivisection is well illustrated by a remark of Sir James Paget. He says, "I may pay a rat-catcher to destroy all the rats in my house with any poison he pleases, but I may not myself, unless with a license from the Home Secretary, poison them with snake-poison."

Editorial Department.

Periscope.

Aneurism of Carotid—Ligature—Recovery.

Mr. Stanley Boyd reports the following case in the *Medical Times and Gazette*:—

J. De V., aged twenty-eight, was admitted on July 29th, 1876. The history he gave was as follows: During the month of February, 1876, he noticed a swelling on the right side of his neck, and becoming alarmed, he applied for relief to a woman living in St. Helier. For five weeks he continued under her care, the swelling steadily increasing. She treated him with "herb medicines," and gave him a plaster, which he wore for a month. No good resulting from these remedies, he next placed himself in the hands of a "charmer" residing at St. Ouen's, and every morning for seven weeks he drove nine miles into the country to see this man, who contented himself with simply touching the swelling. Finally, on July 29th, he entered the General Hospital, under the care of Mr. Charles Godfray.

At the time of admission the swelling was of large size, extending from between the angle of the jaw and the mastoid process to about an inch and a half above the sterno-clavicular articulation. The pulsation and bruit were plainly marked, and the aneurism showed a strong tendency to burst at the hinder part, where the skin was thinner than elsewhere, and of a claret color. The larynx and trachea were pushed far over to the left side. Swallowing, even of liquids, which for some time had been attended with great difficulty, now became impossible. Large nodes on the tibiæ, first noticed shortly before Christmas, revealed a syphilitic taint.

On July 30th, Mr. Godfray applied a silk ligature to the common carotid, close above the sterno-clavicular articulation, and considerable decrease immediately took place; but unfortunately the size of the neck was not taken until August 3d, when it was seventeen inches at the widest part, the patient being a very spare man. The ligature came away on the twelfth day (August 11) after the operation.

The tumor decreased slowly but steadily until about August 27th, when it began to increase rapidly, and in two or three days a fluid swelling had run upward to the ramus of the jaw and forward to the chin. Inability to swallow returned, and the larynx was again thrust over to the left side.

On the evening of the 30th violent hemorrhage occurred. About a pint of blood seemed to have been lost, but as the bleeding stopped before the head nurse—who was in the next ward at the time—could reach the room, it was not noticed whether the blood came from the proximal or distal end; it was, however, of a dark color. The swelling continued as large as ever; no pulsation or bruit could be detected in it. Any attempt to swallow, even the smallest quantity of fluid, occasioned violent coughing, which caused its return by mouth and nose.

On September 1st and 2d small injections of beef-tea were given, but they were retained for a short time only. On the afternoon of the 2d, Mr. Godfray passed a small-sized stomach-tube with less difficulty than had been anticipated, and the patient was fed with beef tea. On the same evening, eggs beaten up in milk were similarly given.

On the morning of the 3d the swelling had not decreased in size, neither had it become more solid. It showed strong signs of pointing at the hinder part. A needle, connected with an aspirator, was passed into it at this spot, and nine ounces of foul-smelling, dark colored blood were drawn off. The flaccid parts were kept in contact by strips of plaster. The patient felt much relieved by this operation, and on the following day he was able to swallow milk and eggs, mouthful by mouthful, but still with some difficulty. On the 4th and 5th the sac filled slightly with fluid from the surrounding parts.

On the evening of the 5th, after a fit of coughing, the sac burst into the pharynx, and a quantity of blood and mucus was coughed up, the sac being completely emptied. Great relief followed, and the larynx returned to the middle line. The patient now swallowed with much greater ease, the walls of the sac rapidly adhered, and he was discharged, well, on September 11.

September, 1882.—The patient is now in good health.

A Simple Operation for Varicocele

In the *Lancet*, Dr. Arthur E. Barker says:—

Having three cases to operate on last autumn, I dealt with them as follows: two on one day, the other five days later. The skin of the scrotum was thoroughly cleansed with a five per cent. carbolic lotion, as also all instruments and the surgeon's hands, no spray being used. The scrotum was then pinched up between finger and thumb, in the usual way, so as to include the veins and exclude the vas deferens; it was then notched with a scalpel, and through the opening thus made a needle bearing a medium-sized twisted silk ligature (previously soaked for about an hour in the same carbolic solution) was passed. The veins were then allowed to slip backward, and the needle was made to carry the silk forward again, through the same puncture, but this time in front of the veins. The latter was thus, of course, included in the two loops of silk leaving the scrotum by the same aperture. The ends of these were now tied tightly over the veins, about one-eighth of an inch apart. They were then cut short and allowed to slip into the scrotal tissues. Everything was in the meantime protected from any contamination by frequent wiping with a carbolized sponge. A little padding of salicylated wool was the only dressing.

The results need only be briefly alluded to. There was a very trifling swelling around the seat of ligature for a few days, together with slight tenderness on pressure, otherwise nothing

was complained of in the first two cases. In the third, considerable pain was felt for a day or two, and there was a little more swelling and tenderness. But in none of the three cases was there the slightest threatening of suppuration. The first left the house in ten days, the second within a fortnight, the last on the fourteenth day. They were then walking about without any discomfort, except the third, who, having had a very large varicocele, still felt a good deal of dragging in the loins on returning to his work, which was very hard, and some neuralgic pains. These, however, passed off later, under the use of laxatives, for obstinate constipation, from which he suffered, though he continued to work for long hours as a grocer's assistant. I watched all these three cases for several months, the last until quite recently, about a year after operation, and now regard all danger of the ligatures coming away as quite over. The latter could be felt under the finger as small knots, deep in the scrotal tissues, which appeared quite normal. Whether they will ever come away remains to be seen, but this is immaterial, as far as the patient is concerned, for they give no trouble now.

Comparing these operations, as far as they go, with the older methods, their extreme simplicity is worth noting, as well as the small amount of trouble or inconvenience to the patient. It is also of some interest to note that, in these three cases, at all events, it was possible to manipulate freely with silk ligatures, and yet introduce them in a sufficiently pure state to produce no suppuration of any kind; and all this with only the simplest precautions as to absolute cleanliness, and without the carbolic spray. There is also a satisfaction in knowing that the veins are thoroughly occluded, and that there is no possibility of the ligatures slipping or being too soon absorbed, as might be the case with catgut. If nothing else, the operation appears an interesting experiment, and worthy of further trial.

The Rational Treatment of Menorrhagia.

Dr. Arthur W. Edis read a paper on this subject, in the Section of Obstetric Medicine, at the last meeting of the British Medical Association, (*Brit. Med. Jour.*,) from which we extract the following. In the term *menorrhagia*, he includes all cases of uterine hemorrhage occurring in the practice of the gynecologist, whether as profuse or prolonged menstruation, or as a loss of blood from the uterus other than that which occurs at or about the time of parturition. Sometimes it acts as a safety valve, a smart attack of hemorrhage often serving to avert a still more serious effusion from the ovary, or its surrounding plexus into the peritoneal cavity, or even preventing an attack of apoplexy at the so-called climacteric period. Diagnosis is the most important element of treatment, for menorrhagia is merely a symptom, not a disease. The age of the patient will often give us a clue to the cause; cardiac complications from rheumatic fever, hæmatocele, ovarian irritation, constipation, etc., in the young; polypi, fibroids, retroflexion, retained products of conception, in the middle aged; climacteric irregularities, cancer in its various forms, hepatic disorders etc., between the ages of forty and fifty. In young plethoric girls, when menstruation is profuse, instead of iron, which will increase the trouble, regulate the diet, limit animal food and use bromides, to lessen ovarian irritation, along with an occasional saline aperient. In anæmic patients, when iron is used it should be combined with salines in moderate doses, as a chalybeate water. In single patients, where menorrhagia is marked and persists in spite of general treatment, an examination should be insisted upon. When the slightest irregularity in the appearance of the catamenia leads to the suggestion of the possibility of pregnancy, any attack of menorrhagia, and especially if it recur, should be regarded as a threatened miscarriage and treated accordingly. When uterine hemorrhage is severe, whether from imperfect expulsion of an early ovum, intra-uterine polypus, submucous fibroid tumor, or other similar conditions, in place of attempting to restrain the flow by linen or cotton packed in the vagina, a far more rational and scientific method will be to insert a sponge tent into the cervix uteri. This will ckeck the hemorrhage and dilate the cervix to facilitate subsequent examination. Hæmatocele is a frequently overlooked cause of menorrhagia, as is also extra-uterine gestation at an early stage.

If hemorrhage be severe and continuous, and the probability of extra-uterine gestation exist, the patient's life being evidently jeopardized by the amount of effused blood withdrawn from the circulatory system, the only hope of saving the patient is to make an exploratory abdominal incision, secure, if possible, the bleeding vessel, or remove the ruptured cyst, as may be found advisable.

Retroflexion, accompanied by congestion of the uterus, in patients who have borne children, is not an unfrequent cause of menorrhagia. A correct diagnosis is here essential before treatment is likely to prove of service. The two conditions are often so intimately associated that, unless both of them be dealt with simultaneously, permanent relief is not obtained. The misplacement serves to keep up the congestion, and the latter equally tends to prevent the uterus from assuming its normal position. Puncturing, scarification, or the application of leeches, followed up by hot water injection and glycerine plugs, may first be tried, to lessen the congestion, a ring pessary, or other appropriate support, being then inserted, to keep the uterus in its normal position, and thus lessen the tendency to a recurrence of the congestion.

The management of hemorrhage, due to large intramural or submucoid fibroids, is one often of much difficulty. Where ergot, bromides, cannabis indica, gallic acid, digitalis, and other similar remedies, fail to arrest the flow, and the patient's health is markedly affected by the repeated or severe losses, the question of spaying, division of the cervix uteri, or removal either of the fibroid or of the entire uterus, should certainly be entertained. The results obtained during the last few years by operative interference in these cases are most encouraging, and the operation well deserves more extended trial. No patient, the subject of uterine

fibroid, where the symptoms are so severe as to impair her usefulness or threaten her life, should be allowed to die unrelieved, without having the option of operative interference.

Vascular disturbances at the climacteric, or change of life, as it is popularly spoken of, should never be treated lightly, but always carefully investigated.

In some instances, regulation of the bowels, restriction as to diet, especially the amount of alcohol, and a proper amount of out door exercise, will be all that is requisite. In others, the hemorrhage persists, in spite of all treatment, and, on a careful investigation, epithelioma of the cervix uteri is at once detected, probably too late for any operative interference. In no case should hemorrhage at this period be diagnosed as change of life, without a careful examination being made and a correct diagnosis formed.

In cases of epithelioma of the cervix, when hemorrhage is a marked symptom, in place of giving ergot or iron and plugging the vagina, it will be much more rational to remove as much of the diseased mass as may be deemed prudent, with the écraseur or curette, or both combined, and then to apply either the liquor ferri perchloridi fortior, the persulphate of iron or the actual cautery.

Device for Estimating Hæmoglobin.

Dr. Charles Finlay, in the *Lancet*, says the following device for estimating the amount of O. hæmoglobin contained in a small quantity (say five cubic millimeters) of human blood will perhaps be acceptable to some of your readers who, like myself, have to work at a distance from reliable instrument makers, and might induce some of the latter to supply the profession with the necessary apparatus.

The principle of my contrivance is not new, being an application of Preyer's spectral estimates of hæmoglobin solutions, and of a tube similar to those employed by Dubosq, in his calorimeter, so as to compare successive measurable depths of a blood solution. The novelty, if such there be, consists in the use of a diluted solution of blood obtained from any red-blooded animal, as a gauge determining the depth of this solution, that will give one or other of Preyer's O. hæmoglobin spectra, and observing the difference of depth required to obtain the same spectra, after a cell, one centimetre deep and filled with one per cent. solution of human blood, has been introduced under the gauged animal blood.

I had only at my disposal a small Browning's pocket spectroscope, of the simplest pattern. I mounted it as an eye-piece, suited to my microscope, and fitted to its distal end, beyond the slit, a hard rubber tube, about twelve millimeters in diameter. The lower end of this tube was cut perpendicularly to its axis, and closed with a plain glass disc, well cemented around the edges. When this eye-piece is in position, and the sliding tube of the microscope is pushed home, the glass plate of the rubber tube touches another glass plate which forms the bottom of a cylindrical vessel standing upon the stage of the microscope. Into this vessel I introduce about fifteen cubic centimeters of a dilute solution of defibrinated blood (the requisite quantity, less than one cubic centimeter, being easily obtained by pricking, for instance, a vein under a chicken's wing), and graduate the solution so that from twenty five to thirty millimeters of depth are required in order to produce the particular spectrum selected as a type, and the value of which in O. hæmoglobin percentage should be especially determined for each particular instrument. The depth is, of course, measured by the distance between the two glass plates already mentioned, but it can be read off at once, provided the sliding tube of the microscope has been ruled on the outside with lines one millimeter apart, and numbered from above downward. The exact depth that produces the typical spectrum having been noted down, the instrument is ready for immediate use.

A cell formed of a piece of hard rubber syringe, No. 0 (say half centimeter, inner diameter), exactly one centimeter long and cemented upright to a microscope slide, is now filled with a mixture of five cubic millimeters of human blood in 500 (half cubic centimeter) of distilled water, and covered with a thin glass cover, excluding all air-bubbles. This cell is introduced between the stage and the glass bottom of the cylindrical vessel containing the diluted chicken's blood, and the typical spectrum again sought for. It will, of course, be found that a lesser depth is now required than before the addition of the centimeter cell with the human blood, the difference between the two depths, divided by the full depths previously noted down, multiplied by the percentage of O. hæmoglobin corresponding to the typical spectrum, and finally multiplied by 100, will be the percentage of hæmoglobin contained in the pure human blood from which the sample was taken.

Apomorphia—Morphia.

Muriate of apomorphia is a remedy which, in our country, has by no means come into such general use as yet, as the well-known effect of this remedy would seem to justify. In an article on cough and expectoration, * Prof. M. J. Rossbach gives the following report of his investigations regarding the effect of morphia in combination with apomorphia.

His results, gained from experiments on animals, as well as from clinical and general practice, have been extraordinarily favorable. Concerning the action of these drugs, his own words are as follows:—

1. Muriate of apomorphia can, alone and internally, without hesitation, be administered as an expectorant, in single doses of 0.005–0.01 ($\frac{1}{1}\frac{1}{2}$ to $\frac{1}{6}$ grain); a dose of 0.03 ($\frac{1}{2}$ grain) *per diem*, in children and adults, sufficed to change an annoying and dry, frequent cough, into one rare, moist and not annoying, accompanied by easy expectoration; frequently much less, only occasionally, more is necessary. R. increased the *daily* dose up to one grain; it is, as a general rule, best to commence, in all cases, with a daily dose of half a grain, subdivided into four or six

* Sep. *Abd. Berl. Klin. Wochschrift*, 19, 20, '82 ref. *Deut. Med. Zeit.*, Aug. 17, '82.

doses, according to age and the nature of the case and the effect of the drug; this dose is then either diminished or increased. Vomiting, which occasionally will happen when a larger dose is given, even one usually not considered an emetic dose, does no harm. Subcutaneously, doses of $\frac{1}{100}$ to $\frac{1}{6}$ of a grain (through central influence) prove frequently emetic. The apomorphia seems also, in phthisical persons, to be a valuable substitute for morphia. This remedy (apomorphia) and emetics (ipecacuanha) and pilocarpia, he considers the expectorants κφτ'ἐξοχήν, and these are the only ones he ever employs, as their action is sure and reliable.

According to R's experience, the following are the best methods of administering apomorphia:—

℞. Apomorphiæ muriatis, gr.ss–gr.$\frac{5}{6}$
Acidi muriat. diluti, ♏viij
Aquæ destillatæ, f℥v. M.
D. in vitro nigro (in dark bottle).
Sig.—A tablespoonful every two hours.

2. The combination of apomorphia with morphia causes a diminution in the frequency of the cough, and makes the expectorated matter more fluid.

℞. Morphiæ muriatis, gr.ss
Apomorphiæ muriat., gr.ss to gr.j
Acid hydrochloric dilut., ♏viij
Aquæ destillatæ, f℥v. M.
D. in vitro nigro.
Sig.—A tablespoonful every two to four hours.

3. In certain cases the addition of atropia is highly recommended by R., but he is totally opposed to giving the latter together with the above medicine, *i. e.* in one and the same mixture, and prefers the following mode of administering all three remedies:—

℞. Morphiæ muriatis, gr.$\frac{1}{8}$ to gr.j
Apomorphiæ muriat., gr.ss to gr.j
Aquæ destillat., f℥iv
Syrup rubi idaei,
(raspberry syrup), f℥j. M.
Sig.—A tablespoonful every two to four hours.
℞. Atropiæ sulphatis, gr.$\frac{1}{80}$.
Pulv. glycyrrh,
Succ. glycyrrhiz., āā q.s.
Fiat pilula, dentur tales, No. xx.
Sig.—One or two pills to be taken at night.

The first solution is given during the day; the pills are best administered in the evening, between 6 and 10 o'clock; one every two hours, with one or two tablespoonfuls of the mixture at the same time, if the frequent irritating cough should indicate such procedure. This treatment is especially recommended in cases of abundant secretion, but not in phthisical persons with a cavity.

Salicylic Acid in Typhoid Fever.

At a recent séance of the Académie, M. Vulpian, made a long and interesting communication on the treatment of typhoid fever by salicylic acid. He had already experimented in this disease with the salicylate of bismuth, carbolate of soda, and boracic acid. With large doses of the bismuth salt, he obtained a notable fall of the temperature, and an incontestible amelioration in the general condition of the patient. But the effect was not lasting, and when pulmonary complications supervened and the full dose of 12 grains could not be given, it was found that smaller doses did not have the same effect.

In this disease it does not suffice, to destroy the typogenous poison in the intestine alone, for it has been already absorbed into the system. It is then necessary to follow it up and attack it in the blood and tissues of the organism.

Carbolic acid is too toxic to be administered in large doses; M. Vulpian has given carbolate of soda in pill form in doses of 30 grains per diem, but without obtaining any well-marked effects. Boracic acid was given in doses of one-half ounce per diem, in a quart of tartaric lemonade, but here again the therapeutic action was almost nil. Salicylic acid has been used by many observers in typhoid fever. M. Vulpian first employed it rubbed up with phosphate of lime, then with sugar of milk, and finally alone. He administered about one drachm and a half of the pure acid per diem, giving from four to five grains every half hour. In most of the patients submitted to this treatment the temperature fell two or three degrees in from 48 to 72 hours, and there was a notable amelioration in the general condition of the patient.

In severe cases the action on the temperature was not so evident.

Salicylic acid does not appear to shorten the duration of the malady, and, as regards its influence in diminishing the proportion of deaths, the number of cases where it was used as an exclusive method of treatment are not sufficiently numerous, as yet, to express an opinion.

M. Vulpian does not, however, hesitate to affirm that no other medication produces so constantly a considerable fall of the temperature and so marked an amelioration in the general condition of the patient. He concludes that, while salicylic acid does not constitute a veritable curative agent, it yet has a powerful moderating influence on typhoid fever, and merits a prominent place in the ordinary treatment of this disease.

Extraordinary Case of Early Puberty.

Dr. T. Woods says, in the *Lancet*:—

The following case is, I think, worthy of being put on record: W. is now six years and seven months old, having been born on January 21st, 1876. A week or two ago I saw him while bathing, and was greatly surprised to see that his genital organs were as fully developed as in the adult, and his pubes covered with a thick crop of dark brown hair, presenting the appearance of a youth of seventeen or eighteen; hair is also commencing to grow on his upper lip. His height is about 4 feet 9 inches, and he is big and muscular in proportion, but I regret that I am unable to give his weight and chest measurement. His voice, for more than a year, has been gruff and hoarse, as it usually is at puberty, and his grandmother tells me that he has had hair on the pubes since he was three years of age. He is so wild and mischievous that she has had to apply to the magistrates to have him sent to an industrial school, which they consented to do, and he has now been committed for five

years. A few days ago he took away a tradesman's cart, upset it on the roadside, cut the harness into pieces, and galloped the horse about till he was tired of the fun, and then let it go. His clothes were taken away from him, and he was put to bed, to keep him from further mischief. He, however, managed to find his grandfather's best black trousers, cut off the bottoms, so that they might fit him, and escaped through the window. One day, recently, he found some pigs straying, and drove them some miles to a butcher, and tried to sell them; failing to do so, he gave them away to some one he met. It required three policemen to take him to the workhouse (to which he was sent until arrangements could be made for his removal to the industrial school), and when they had carried him there, face downward, as they were compelled to do, he smashed a bedstead into atoms, kicked the plaster off the walls, cursed and swore in a most fearful manner, and had to be removed to the police-station, for safety. He was not a large baby at birth, but grew rapidly after twelve months. He commenced to cut his permanent teeth between four and five years of age. His father is in a lunatic asylum, suffering from melancholia. I have known the child since birth, and am perfectly certain of his age.

Morphiomania.

The *Medical Times and Gazette* says that in a paper read at the Rochelle meeting (*Gaz. Hebd.*, September 2), Dr. Landowsky drew attention to the fact that, besides the cerebral disturbances caused by the excessive use of morphia, venous congestions were also induced by it, which in the long run led to permanent lesions, especially of the kidneys, inducing albuminuria or glycosuria. He also called attention to the too great frequency with which injections of this powerful agent are entrusted to inexperienced nurses and the patients themselves. Prof. Verneuil remarked upon the frequency with which patients who came to consult surgeons have before that time been trying and abusing the hypodermic method. In their case a condition is generated which, at the time they may have to undergo an operation, may compromise their existence by their intolerance of chloroform, or later on expose them to the occurrence of fatal erysipelas or diffuse phlegmon; not that they are still under the influence of morphia, but have become, through it, the subjects of glycosuria, albuminuria, etc. M. Rochard, in relation to the colossal doses that are sometimes employed, cited the case of a lady who injected as much as three grams (forty-five grains) of the hydrochlorate of morphia daily. He further remarked that even when large doses are injected, neither constipation, loss of appetite, nor any other affection of the digestive organs is produced, while even small doses taken into the stomach produce these effects. Dr. Landowsky has observed in several women who accustomed themselves to excessive injections, that small mucous bursæ formed on the sides of the first phalanx of the index and median finger, which are due to the manner in which these morphio-maniacs practice the injections rapidly, with one hand, when they are alone. In doubtful cases, the existence of these bursæ may throw light on the diagnosis.

Lesions of the Phrenic Nerves.

The *Lancet* says that the effects of lesions of the phrenic nerves have been studied experimentally by MM. Henocque and Eloy. The effects on respiration, of injury to one or both, were registered on recording apparatus. The immediate effect of a lesion of one nerve was found to be a change in the respiratory rhythm, the movements being at first rendered more energetic. After a few moments the diaphragm ceased to move on the side which had been injured, and the contractions of the inferior intercostal muscles and accessory elevators of the upper ribs were rendered feeble. The experiments were made on animals in which the respiration is both abdominal and costo-abdominal—the dog, cat, guinea pig, and the monkey. Death often rapidly follows an injury to the phrenic nerve, but some animals survive, and the thorax is then motionless on the corresponding side, especially in the cat and the monkey. The respiratory movements become visible a few days afterwards, and are of course due only to the intercostals. At a later period, during the reparation and regeneration of the nerves, the tone of the voice was observed to be altered. Respiratory tracings, taken two, four, and ten months afterwards showed the gradual return of the respiratory curve to the normal. But even when the rhythm was restored, the movements continued deficient in extent. Moreover, in spite of the regeneration of the nerves, there remained a hypertrophy of the inferior intercostal muscles, set up by their supplementary activity.

Reviews and Book Notices

Book Notices.

The Principles and Practice of Surgery. By John Ashhurst, Jr. M.D., etc. Third Edition, Enlarged and thoroughly revised; with 555 illustrations. Philadelphia: Henry C. Lea's Son & Co., 1882. 8vo, pp. 1064.

Dr. Ashhurst's *Surgery* has won more than an average share of professional esteem. It is a condensed treatise, covering the whole domain of the science in one manageable volume, and in these days of unwieldy, spread-out encyclopædias, it is a relief to many to find a writer whose aim is to say the most in the least compass.

The present edition has had a thorough revision, the novelties in surgical practice and the recent observations in surgical science have been incorporated, but the size of the volume has not been materially increased. The opportunities of the author as a clinical teacher and hospital surgeon, as well as his experience in a large private practice, have been of avail to him in deciding, from personal observation, the superiorities of the methods he recommends.

His arrangement is perspicuous, and his language correct and clear. The work is well printed, and an excellent index closes the work. On the whole, we consider it the best system of surgery in one volume which could be named as the product of an American author.

Microscopical Morphology of the Animal Body in Health and Disease. By C. Heitzmann, M.D. 1 vol., 8vo, pp. 849. J. H. Vail & Co., New York. Cloth, price $7.00.

It is a satisfaction to welcome a work which is the result of intelligent, disinterested, thorough scientific research. Such is the one before us. It represents the results of more than ten years' devotion to histology, and will undoubtedly mark an epoch in that branch of science. While principally from the pen of Dr. Heitzmann, it contains a number of articles by others who have worked with him, or in the same direction; among these we may name Drs. Louis Elsberg, H. G. Beyer, U.S.N., Jeannette B. Green, John A. Rockwell, etc. These various associate authors have developed some special lines of observations which have a place in the general scheme of Dr. Heitzmann's book.

The fundamental difference between the histological theory of this work and those of other writers is the assertion that the doctrine of isolated cells as the basic form of organic life, as taught by Virchow, is erroneous. The real basic form is the protoplasm or bioplasson, and cells assume activity in the phenomenon of life, as they are brought into contact, as they unite and anastomose, and thus form an inter-connected network. The living contractile matter is not the cell, but the nucleus, nucleolus or contained granules.

The practical results of this new view are striking in the extreme, and offer the promise of wide gains in the fields of pathology and diagnosis. It is perfectly possible for the practiced microscopist to judge accurately of the general condition of the system, and even detect the presence of certain diseases by the appearance of the blood corpuscles alone. "In fact," says the author, "the microscope reveals so much of the general health of a person, that more can be told by it, in many instances, than by the naked eye, or by physical examination" (p. 61). Where the enthusiastic advocates of this method of research would draw its limits, we know not. One young physician is mentioned who refused to marry the girl to whom he was engaged, until she had consented to have some blood drawn and submitted to Dr. Heitzmann for his opinion as to whether the granules were just what they should be. We hardly know whether to say that we are glad or sorry to add that, after due scrutiny, he recommended the marriage!

The ground covered in the book may be briefly stated as follows: The author first reviews the phenomena of living, healthy protoplasm, tissues in general, connective tissue, nerve tissue, muscle tissue, and epithelial tissue. Thence he proceeds to discuss pathological processes; as inflammation, tuberculosis and tumors. Passing from these he takes up in order the skin, the digestive tract, the teeth, the liver, the respiratory and urinary tracts, the urine, and the genital tracts of both sexes.

The text is illustrated with 380 original engravings, made after very accurate preparations by Dr. Heitzmann. The literary finish of the book is open to criticism here and there, but not in important points. But a very important point is the total absence of an index. We cannot recommend any one to purchase a scientific work of 800 or 900 pages when the author and publishers have been so negligent of what they owe the reader, as not to supply this indispensable requisite to the proper use of the book.

The Library Index. R. G. Hutchinson, 41 Maiden Lane, N. Y. Half-bound. Price $2.50.

Physicians are, at any rate ought to be, a book-buying, library-owning class of people. Even a small library is more available if it has a well-arranged catalogue. Mr. Hutchinson has prepared a neat, well-made blank book, sufficient for a library of about 1800 titles. The pages are ruled with printed headings, giving title, author, publisher and date of publication, number of volume, size, style of binding and remarks. He will mail the book on receipt of price.

Speech and its Defects, Considered Physiologically, Pathologically, Historically, and Remedially. By Samuel O. L. Potter, M.D. Philadelphia: P. Blakiston, Son & Co. 12mo, pp. 114. Price, cloth, $1.00.

This is an essay which, as a thesis, took the Lea prize at the Jefferson Medical College. The author states that he himself was a sufferer from "dyslalia," and has been led to give the subject unusual attention. It is, in fact, a treatise on stammering and stuttering, and the general title of the book is wider than its subject matter. The views of the author are very judicious, and he exposes with an unsparing hand the tricks of the charlatans, the self-dubbed "Professors," that go about the country pretending to cure the unfortunates who fall in their way. He also sets forth clearly what the real means of relief are. An excellent bibliography of the subject closes the volume.

THE

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FALLACIES IN MEDICAL TEACHING.

It is taken as prima-facie evidence, that if a man is a professor in a large college, a hospital physician to a populous hospital, and enjoying the well-earned reputation of a learned member of the profession in a great city, he is qualified better than any one else to teach medicine.

On the other hand, it can be shown that all these seeming advantages present also serious drawbacks to the success of the teachings of such a man. Not to his personal success as a teacher; we do not mean that; but to the value of his teachings. We maintain, and shall show, that just these apparently favorable surroundings incapacitate him from doing the most good to students.

To illustrate our position at once, from a country where it can be most readily demonstrated, we turn to Germany. As a rule, a professor in a German university has been a most earnest closet student; he has spent his nights and days in the library, over the dissecting table, in the hospital wards, at the dead room, peering through the microscope, writing for the press: has he ever seen the normal rise, development and termination of a disease? Quite likely he has not. When a patient is brought to a hospital, the disease has usually progressed far; the patients there are under entirely different surroundings from those in private life; the circumstances that it is, and must be, in a large city, bring into action a whole series of influences with which the average practitioner has nothing to do.

When the professor has acquired fame, is he more favorably situated to see disease as the ordinary physician meets it? No, even less so. He is called in as consultant in desperate cases, for infrequent visits, and has no time to watch a case. His opinions, his mode of practice, his acquaintance with the forms of disease, his estimate of the actions of medicines, must all be necessarily made up from a materially different series of observations to that of the great mass of his professional brethren. Strictly speaking, he is not qualified to give them the best instruction which they are capable of receiving; his doctrines must be misleading and his observations delusive.

We believe this is conspicuously shown in Germany, and the results of this state of affairs are very marked there. It may be freely conceded that in many branches of theoretical medicine the Germans stand easily ahead of the world; and it must be added, with equal justice, that in practical medicine, in the therapeutics of diseases they are far, very far, behind either the English or Americans. Any one who will examine the mortality statistics of the German hospitals will be shocked at the heavy death rate; but if he follows the professor through the wards, or reads many of the issues from the press, and then learns the indifference and often contempt with which the therapeutics of a case is dismissed, he will see the cause of this fatality. It has actually progressed so far now that a student or young physician who busies himself earnestly with the problem of curing disease, of the definite removal of sickness and restoration to health, is looked upon as of limited intellect,

and with little grasp on the greatest questions of his profession.

This is so already in Germany, and it is becoming so in this country. Our eminent teachers are too busy with lecturing, reading up, hospital work, writing, and consulting practice, to have any time for the patient observation of disease as it is seen by the physician of limited family practice, or the country doctor. We urge that this be recognized all around, and that the profession be on its guard against that decay of practical medicine which has struck the Germans and undermined their usefulness like a dry rot.

DANGEROUS OCCUPATIONS.

The recent death, in New York, of one of the line-men of the Brush Electric Light Company, suggests some thoughts on the precautions that ought to be observed in the employment of men for all labor that may be attended with danger to life.

It seems that this man was employed to break and connect again the electric wires, while the current was passing through them. To do so, it was necessary to scrape off the insulating material, in order that the bare wires might be joined.

The company had issued a notice to all men so employed that they must uncover but one wire at a time, and after reconnecting the severed ends, to wrap the exposed parts with insulating material before exposing the second or continuing wire. This man had been in the employ of the company for more than a year, was considered one of their most intelligent men, and was, therefore, presumably aware of the fatal danger that might arise from disregard of this precaution.

When he had been at work for a few minutes only, he was noticed to be clutching both the negative and positive wires of the line, and was hanging limp and apparently lifeless against the wires stretched on the pole. His right leg was thrown over the cross-bar, and he swung in mid-air, the wires preventing him from falling to the sidewalk.

When taken down and removed to the Station House, the only marks of violence or disfigurement on the body were on the palms of his hands, which were terribly burned and blistered.

From this it would seem that the cause of death in this case must have been an electric shock received from the man grasping the two wires and thus making a connection between them. If both or one had been thoroughly insulated such a catastrophe could not have occurred.

Therefore we must consider that both wires must have been unprotected; yet it would seem very improbable that a man acquainted with the danger (as this man must have been) of handling two unprotected wires, would do so.

It could, however, happen that, being daily accustomed to work among electric wires (familiarity breeding contempt), this man, to save time, may have scraped the insulating material from both wires consecutively, intending to handle only one at a time; to complete the first step in his work, to cut, re-unite and insulate the first wire, before he touched the second.

After he had performed the first part (or scraping) he may have been rendered unconscious, by an attack of epilepsy, heart-disease, or cerebral inactivity from some other cause, and feeling himself falling, grasped for the nearest support, and seizing the exposed wires, received the fatal shock.

This is only an hypothesis, but it is one worth consideration.

The autopsy may not have revealed any lesion to account for this sudden attack of unconsciousness, but nevertheless it may have occurred, since pathology is far from being a perfected science. If one wire were found perfectly insulated, then, of course, our theory falls to the ground.

But the point we desire to make still holds good.

In many trades men are exposed in such dangerous positions that very clear heads and complete possession of full mental faculties are at all times requisite to prevent the occurrence of fatal accidents.

Thus painters, riggers, roofers, and so on, are so exposed that any slight attack of unconsciousness, even vertigo to a slight degree, may cause them to lose their footing and to be precipitated a fatal distance.

When men apply for service in the army and navy they are subjected to critical physical examinations, to determine their fitness or unfitness for the arduous duties they propose to undertake. This rule applying even to those whose occupation will be of such a nature that some forms of physical infirmity would not materially interfere with their usefulness.

Would it not be wise, in the interests of humanity, to subject all men proposing to engage in work that required constant self consciousness, a temporary absence of which might prove fatal, to a preliminary examination ?

This idea is seemingly a utopian one, but is it impracticable ?

More difficult tasks have been accomplished.

To make such a proposition a reality rests with the medical profession ; they must instruct the public more fully in regard to the dangers hinted at, and suggest, re-suggest, and continually advise, the only available remedy.

THE SCIENCE AND STUDY OF HYGIENE.

That hygiene is truly a science, and a most progressive one, every reading physician will admit.

That it has of late and is to-day making rapid strides towards the position of an *exact* science, must also be conceded.

That it is not properly or sufficiently recognized by the medical profession in our country, is the third of the propositions which we feel sure facts will substantiate.

The universally recognized truths that we have in certain instances the absolutely sure means of preventing the inroads of disease, entitle the branch which teaches such precautions to the dignity of a science ; this, without further argument, establishes the first section of our first proposition.

The rapidly increasing space devoted to the hygienic researches of great men, in our leading professional journals, demonstrates the progression of the science.

The wonderful and *accurate* discoveries of Pasteur, Koch, Wood and Formad, and others, all of which have an intimate relation to and bearing on the science of hygiene, tend to entitle it to rank among the exact sciences.

Thus, then, in a few words, we have given our reasons for all of our assertions save the last.

That hygiene is not adequately appreciated by the profession of this country, is abundantly evidenced by the position which it holds in the curriculum of some of our best colleges.

Constituting, as it really does, the most important, because the most beneficent branch of medical science, its teaching is relegated to an auxiliary course, upon which attention is not compulsory, and, therefore, very meagre.

It thus is made to adorn, rather than to form an important portion of, professional education. Ranking with botany, zoölogy and comparative anatomy, it does not assume, in the eyes of the inexperienced student, that magnitude to which its importance entitles it. He who may have the leisure and inclination to become an *accomplished* physician will attend this extra course, and thus acquire some little smattering knowledge of hygiene, while the majority of students will leave their alma mater with no knowledge or appreciation whatsoever of this most sublime science and fascinating study.

There are two classes of physicians, to each of which the science of hygiene will present itself in a very different aspect.

To the man who practices medicine *solely* as a *business*, who constantly considers *only* how much money he can make out of it, hygiene presents itself as an enemy, as a science to be discouraged, since it may tend to reduce his pecuniary gains.

To the noble-minded and philanthropic physician, who can see more than mere "*profit or loss*" in the grand profession of medicine, hygiene will present itself in its true aspect, as the noblest science to which the mind of man can be devoted. Yet to this selfish class, who would

belittle sanitation, because it would, so to speak, rob them, a few words are necessary.

When the public, when your patients, come to recognize hygiene in its true light, and to place it where it properly belongs, you will not lose by this advance.

Your duties will become twofold; for not only will you be called upon to cure disease when it has become established, but you will also be requested, by sensible persons, to instruct them how to avoid disease; so that you will thus have both fools and wise men for clients.

When the public learn that almost all diseases are preventable, and that we nearly all *ought* to die of old age, they will be just as anxious to have their physical condition inspected at stated intervals, and to receive advice that will tend to retain a good condition or to repair a vitiated one, as corporations now are to have boilers regularly inspected and repaired, that subsequent disaster may be averted.

But that the public may recognize the inestimable value of hygiene, the profession must first be made alive to its importance, and to accomplish this, the institutions of medical instruction must take an actively progressive step.

The chair of hygiene should be made a part, and an exceedingly prominent part, of the regular winter curriculum; the science should be thoroughly taught, and a most rigid examination be required in this branch, as one of the essential requisites to graduation.

England is rapidly showing its appreciation of hygiene; do not let us wait in this important matter, as we do for the fashions in dress, an indefinite period, to follow this worthy example. Let some prominent institution start the suggested measure and all the others will fall into line; the fruit is ripe, and he who plucks it first can have the largest bite.

The Parkes Museum of Hygiene.

H. R. H. Prince Leopold, Duke of Albany, has consented to become the President of the Parkes Museum of Hygiene. Many of the most distinguished names in England are found among its list of life members. It will no doubt be of much service in promoting and fostering an interest in sanitary matters.

Notes and Comments

The Quarterly Compendium of Medical Science.

In compliance with the wishes of many subscribers, we shall hereafter issue the Compendium of Medical Science *quarterly*, instead of *half-yearly*, as heretofore. It will appear in the first week of January, April, July and October. The four numbers will make a volume the same size or somewhat larger than the two numbers of the Half-Yearly. The arrangement of matter will be in a general way the same.

It is believed that this change will prove acceptable to all who have hitherto taken the Compendium, and will, we trust, recommend it to many who have not yet subscribed for it. As a quarterly, it will embrace all that is new and valuable in the medical literature of both continents. It will contain a synopsis of everything of the first order of importance for the physician and surgeon to know. The advance of medical science all the world over will be faithfully mirrored in its pages.

We especially urge all subscribers to the Reporter to send us $6.00 for 1883, and take the quarterly Compendium along with the Reporter. We can assure them they will find it repays them tenfold.

Threatened with Typhoid.

A correspondent of the *Boston Medical and Surgical Journal* says: Let me give you a little item of personal history.

Several years ago I was an inmate of an institution in which typhoid fever showed itself. Two young gentlemen with whom I was intimately connected, were successively stricken down with it. (The conductor ventilated the sewers of the neighborhood directly under their windows.) One of these cases remained in the house, and was in part under my care. The diagnosis in each case was confirmed by gentlemen whose official position guaranteed their ability. After the disease was fully established in the second case, I found myself afflicted with a slight headache, marked dullness, quickened pulse, and, if I remember, a raised temperature. Fearing that my condition was the result of imagination (I had naturally dwelt much upon the sickness of my friends and my similar exposure), I applied for advice to two physicians outside of the institution. They both told me I was threatened with typhoid, and advised me to clear out, which I did. In the country I very soon returned to my normal state, and after per-

haps a week or ten days returned to my duty; long before either of the cases mentioned above had even begun to convalesce. There can be no doubt, at least there was none in the minds of my advisers, that if I had stayed I should have been the victim of typhoid; I was threatened with it, and the catastrophe was averted. Such cases are not rare. This one merely serves as an example.

The Respiratory Centre.

In *Pflüger's Arch.*, xxv, Dr. J. C. Graham makes a preliminary communication in regard to a *new specific regulatory nervous system* for the respiratory centre.

In the abdominal cavity are spread sensitive fibres, which have an analogous form to the respective fibres of the vagi, and form, in connection with them, the regulatory nervous system of the pleuro-peritoneal cavity. (1) On central irritation of the splanchnics, laid bare and prepared in the abdominal cavity and severed, always an expiratory stand-still of respiration sets in, the diaphragm completely collapses, while the abdominal muscles as expirators contract violently. The same result can be noted, if both vagi and sympathetic are cut through in the neck. (2) On division of the medulla oblongata in its most anterior part, as well as after division of the spinal medulla, between the 11th and 12th dorsal vertebræ, irritation of the splanchnics causes also, without exception, cessation of respiration during expiration. If the spinal cord is divided between the 4th and 5th dorsal vertebræ, irritation of the splanchnics has totally lost its effect. (3) In dyspnœa and apnœa also, irritation of the central stump of the nervous splanchnics exerts this specific influence on respiration; in apnœa after irritation the apparently collapsed diaphragm assumes a still plainer expiratory position.

These experiments tend to explain, to a great extent, disturbances of respiration which are so frequently noted in dyspepsia, as well as in other morbid conditions of the alimentary canal. It never seemed to us clear why, for instance, in ascites of high degree, the patient should so frequently have a similar trouble in expiration—not being able to get the air out of the lungs—as is noted and well-known in cases of asthma due to emphysema of the lung. That, in dropsy of the abdomen, inspiration should be difficult, was easily explained, in consequence of the encroached space, but the observations of Graham show also how disturbances of expiration in such cases, may be brought about.

Pathology of Herpes Zoster.

In two cases of herpes zoster, Dr. E Lesser found a morbid condition of the respective spinal ganglia; in the one existed an inflammatory process, evidently started in consequence of a tubercular pleuritis. In addition to these two cases, which we find described in *Virchow's Arch.*, lxxxvi, p. 390 *et seq.*, L. cites also two other cases, observed during life, in which the herpes zoster made its appearance in cases of kyphoskoliosis of the thoracic spine. The eruption, following the course of a spinal nerve, showed itself here on the side of the convexity.

Morbilli Scarlatina.

An eight-year old boy was affected with mild catarrhal symptoms of the respiratory passages and of the conjunctiva, being attacked by measles. On the fourth day, when the temperature had resumed its normal again, it suddenly ascended; there was enlargement of the spleen, angina and scarlatina exanthem, with miliary eruption. On the sixth day, mealy desquamation of the face, neck and throat; but synchronously the scarlatina eruption spread further; stomatitis developed itself, and then desquamation in flakes took place, which outlasted the mealy desquamation. Convalescence set in and the boy got well.

While it is generally thought that two such infectious diseases will not break out in the body at one and the same time, in this case their consequences, at least, seemed to have gone hand in hand with each other.

A Case of Fistula of the Pancreas.

The following rare and exceedingly interesting case is reported by Dr. D. Kulenkampff, in the *Berlin. Klin. Wochenschrift*, 1882, No. 7, and referred to by Prof. L. Rosenthal, in his *Centralbl. f. d. Med. Wissensch*, 28, 1882, p. 511.

A laborer, æt. 39, received a severe injury, being hit on the abdomen. After the grave inflammatory symptoms had apparently all subsided, the patient felt comparatively well, but complained of gastric disturbances. Gradually a tumor developed itself in the epigastric region, and growing to the size of about a child's head. As he was uncertain in regard to the diagnosis, Dr. K. cut carefully, first through the abdominal wall, in the linea alba; then he punctured the swelling with Potain's apparatus, and about a wine-bottleful of a clear fluid was discharged, containing a large quantity of albumen, but no

"Bernstein" acid. Later the peritoneum was attached to the abdominal walls, the tumor opened, and a litre of the same fluid taken out. He then established drainage, and daily ¼ to ¾ litre of this fluid was discharged. The wound closed, but a small fistula remained, and notwithstanding all endeavors, the skin surrounding it continued sore. This fact caused the suspicion that he had to do here with a pancreatic fistula, and the chemical analysis, which was made by the chemist, Dr. Hausmann, confirmed this. The fistula soon afterwards closed forever. We may gain from this case some approximate idea of the amount of pancreatic juice secreted within 24 hours in the human being.

Tonsillotomy and Hemorrhage.

Dr. N. A. Powell read a paper on this subject before the Ontario Medical Association (*Canada Lancet*). Statistics show that dangerous hemorrhage occurs in about 1 per cent. of all tonsillotomies. After the operation, the surgeon should not lose sight of the patient for some hours, but should make frequent and careful inspection of the throat. Blood may pass into the stomach, and give no external sign till blanching of the face or faintness shows its loss. If he finds hemorrhage in unsafe amount, he should resort at once to direct pressure, either with the fingers or a sponge, on a firm holder. After this, he should examine for bleeding points, and twist them. Cold should be applied, and in the failure of all measures, ligature of the external carotid, or of the common trunk, may be considered.

Resorcin in Cholera Infantum.

Dr. M. Cohn, in his inaugural thesis at Stuttgart (*Centralbl. f. d. Med. Wissen.*, 1882, *p.* 512), speaks of the effect of resorcin in cases of cholera infantum. He made use of a solution of 0.3 (5 grains) resorcin, six drachms of water and about two drachms of simple syrup. He observed no disagreeable side effects, and of 35 children who had suffered from summer complaint, 30 rapidly regained their health. These observations were made at the University clinic for diseases of children, in Stuttgart. In no case was noted any bad results, and Cohn considers this remedy almost a specific in catarrhal inflammatory conditions of the mucous membrane of the alimentary canal in children. He found it also uniformly successful in all cases of stomatitis, aphthæ, etc.

Specific for Sore Throat.

After a large number of observations, Dr. Robt. N. Hormazdji, of Cheltenham, has come to the conclusion, that in all acute cases of *tonsillitis* salicylate of sodium is a specific, while in chronic cases it seems to possess no effect whatever. He recommends about 15 grains of the remedy every hour, till the most urgent symptoms are relieved, when only half the dose is administered. At the same time he employs a gargle, consisting of about 10 grains of the salicylate of sodium, one ounce of glycerine and three ounces of water. He found the remedy especially specific in its effect in very acute and severe cases, as also in the angina of scarlatina, and of erysipelas.

Function of Spleen and Bone Marrow.

Dr. Theo. Korn (*Virchow's 5 Arch.*, lxxxvi, p. 406), examined the hæmatogenesis in pigeons, withdrawing from a series of animals, in intervals of five days, from five to seven grms. of blood; he then repeated the same experiment in animals the spleen of whom had been removed four weeks before. The normal power of resistance of pigeons against venesection was not diminished by the extirpation of the spleen. In the first series, Korn demonstrated, in every case, atrophy of the spleen. In both series the observation was made that the marrow of the bone became richer in blood, while a great part of its fat seemed to be absorbed and made use of for other purposes. While these experiments clearly show that the spleen, at least in birds, is of no importance for the regeneration of the blood, they demonstrate the fact that the marrow of the bones undoubtedly participates in the formation of this fluid, which is the more apparent in birds, as many of their bones do not contain any marrow at all.

Bone Gummata.

From careful investigations made by Dr. Chiari, in Vienna, we learn, that in syphilis, *gummata* in the *marrow* of the bones happeu far more frequently than has generally been believed to be the case. They rarely appear on the surface, and are, therefore, seldom recognized. We are well aware that the osteocopic pains, when they are not due to periosteal affections, have not found any explanation as yet. From the results of the post-mortem examinations by Chiari, we draw the conclusion, that in all such cases we have to do with such gummata in the

marrow of the bones. The remarkable influence of iodide of potassium on all gummatous formations would also explain its rapid beneficial action in such obscure osteocopic pains.

The Influence of Blood Pressure on Cardiac Inhibition.

The *Lancet* says that Messrs. Sewell and Donaldson have been investigating the effect of alterations of blood pressure within the cavities of the heart upon the inhibitory function of the pneumogastric nerve. With increase of the venous pressure, while the arterial pressure remained constant, it was found that the inhibitory effect of an electric stimulus was lessened. Variations of arterial pressure did not have any effect upon the action of the vagus.

Displacement of the Bones of the Skull

In the *Revue de Méd.*, 1882, ii, p. 112, Dr. I. Parrot reports three cases of tubercular meningitis in children, nine months, two and three years old. The cases ran a very rapid course. The interesting observation Parrot made on these cases was a displacement of the bones of the roof of the skull. The bones separated up to 3 mm. from each other. The space between them was filled by a sanguinolent fluid. We must remember that they were not cases of acute hydrocephalus, where, in consequence of extravasation, such separation of the bones, not firmly united as yet, would have been most natural, but cases of tubercular meningitis, where the simple inflammatory exudation produced this result.

An Abnormally Long Processus Styloidens.

Two cases, in rapid succession, appeared at the University clinic for internal diseases, in Vienna. Both persons complained of great and continuous difficulty in swallowing, and in both an unusual prolongation of the styloid process was detected as cause of the disturbance. The process could be felt behind the tonsils. In the one case the right process was elongated, in the second, both. In the latter both tonsils were of the size of a large bean, without presenting any sign of inflammation, and pushed forward. In the first case it was possible to fracture the bone, and then to give the broken piece such a direction tha the impediment to swallowing ceased and never reappeared, while in the other case they were not able to fracture the bones.—*Wiener Med. Wochenschr.*, 1882, *No.* 5.

Ether Inhalations in Angina Faucium.

In the *Riv. Clin. di Bologna*, Prof. Concato recommends ether spray as an inhalation in sore throat. The patient takes the exit tube of a Richardson's spray producer in his mouth, and sulphuric ether is sprayed against the pharynx for three minutes; this is repeated every three hours. Six cases were cured without other remedies. Each case began with a rigor and a sharp attack of fever, temperature 104° F. There was swelling of the sub-maxillary gland, and pain and difficulty in swallowing. The tonsils were swollen and protruding.

Hermaphroditism.

The *Lancet* says that a woman was recently delivered, in the British Lying-in Hospital, of a living child, which presented the characteristics of so called spurious hermaphroditism. There is a large penis or clitoris, with a prepuce bound down by a strong frænum. Immediately below this is a small canal, capable of admitting a good-sized probe, and from which urine is voided. The penis (?) is of natural size for a newly-born infant, and presents at the apex a well-marked depression, resembling the external urinary meatus. The scrotum (?) is divided, and resembles the female labia, but no trace of testes can anywhere be discovered. So equivocal are the appearances that it is at present impossible to determine the sex of the child. Dr. Fancourt Barnes, whose patient the mother is, seems to incline to the opinion that the type is rather feminine than masculine. If the child lives, it will, in all probability be shown to the members of the Obstetrical Society, when the problem of the sex may be solved.

The Last Thing in Incubation.

The *Lancet* is authority for the statement that M. Tarnier, of the Maternity Hospital, in Paris, has had constructed a box which is very similar to the incubators used for poultry. Into this he places all the weakly and sickly children.

This box is divided into two compartments, the lower one being used as a reservoir for hot water, while the infant is placed in the upper one, which is well stuffed at the sides and fitted with a sliding glass cover. The temperature is maintained at 86 degrees, Fahrenheit, and M. Tarnier has found that by keeping infants in the incubator for a period varying from two days to six

weeks their vitality is enormously improved. He has made experiments upon five six-months, children, six seven-months, and thirteen eight-months, children, and he has only lost two of them, whereas, according to his statement, three-fourths of them would have died but for this adventitious aid to vitality.

Traumatic Ophthalmoplegia.

Dr. Gruening recently presented to the New York Society of German Physicians (*New York Medical Journal*) a man who, after receiving a sharp blow on the left eye became blind. The lids were discolored, upper lid paralyzed, and bulb immovable, so that there was paralysis of the motor oculi, abducens, trochlearis and optic nerves. The pupil was stationary and large. The diagnosis was, fracture of the base of the orbital pyramid, with rupture of the optic nerve and compression of all the nerves passing through the superior orbital fissure. Iodide of potassium, with hypodermic injections of strychnia and faradization constituted the treatment. At the present time the bulb could be moved slightly in all directions. Fracture of the orbital pyramid is usually followed by atrophy of the optic disc.

Hydrophobia Cured with Aconite.

Dr. D. H. Cullimore reports, in the *Lancet*, the case of a boy aged ten years, who, some three weeks after being bitten by a supposed rabid dog, commenced to exhibit symptoms of hydrophobia. As soon as the nature of the disease was suspected, strict quiet was enjoined, and he was given one minim tinct. aconite, six grains bromide potassium, six minims tinct. cinchona, to half an ounce of water, to be taken every half hour for twelve doses and then three times a day. He was restricted to milk and arrow root. In about two months he was discharged, cured. The author gives a long theoretical explanation of the action of aconite in this disease, which it is unnecessary to notice here.

Oxygenated Water.

M. Brochin reported some experiments made by M. Paul Bert and Becquard at a recent meeting of the Société de Médecine Pratique (*British Medical Journal*). Oxygenated water was used with great success in the treatment of purulent cystitis, ozæna and ringworm; also, internally in uræmia and diabetes. To preserve it, it must contain an acid, for which hydrofluoric acid is used. A certain amount of oxygen is liberated from this water, in the form of ozone, and it is in this way that it acts.

Bilateral Herpes Zoster.

Dr. Zinsser reports a case of this affection in the New York *Medical Journal*. Bilateral herpes zoster is very rare. But three cases are reported. The attacks were quite frequent, and were regularly preceded by a peculiar train of symptoms similar to sea-sickness. The patient is otherwise in good health, strong, and by no means hysterical. His disease is probably of central origin.

Correspondence.

Congenital Occlusion of the Rectum.

Ed. Med. and Surg. Reporter:—

August 17th, 1882, Mrs. S., of this place, aged 28, was delivered of an apparently healthy female child, by my partner, Dr. J. A. Rawes. The child urinated freely that day, but had no motion of the bowels up to the 19th, when we were called in. It refused to nurse, lay quietly, but would occasionally strain violently. An examination revealed a natural anus, but on attempting to introduce the end of a female silver catheter, we met with an obstruction, half an inch from the external parts. On introducing a speculum it revealed a complete cul-de-sac, the bottom presenting a dense fibrinous structure. Assisted by Dr. J. H. Mack, an experienced practitioner, we etherized the child, passed a catheter up the vaginal canal, and introduced a bistoury, guided by the catheter, through the bottom of the sac, in the direction we hoped to find a termination of the rectum, but failing to reach it, resorted to a trocar, passing it up to the promontory of the sacrum, when we desisted and abandoned the operation. The parents objected to our making an artificial anus, and we were compelled to leave the child to its fate. It died on the 20th, and on the 21st we made the autopsy. The intestines were very much distended with gas, but they and all the abdominal viscera were in their normal situation, excepting that the descending colon terminated in an expanded pouch, on the left lateral wall of the belly, above the pelvic basin. On inflating it with air (after removing the meconium that distended it), we could discover no opening of any kind, but attached to the end and extending down the entire space usually occupied by the rectum, was the same dense fibro-cellular structure that formed the floor of the anal cul-de-sac. The health of the mother had been good during her gestation, and she had received no shock or fright that could be assigned as a cause for so deplorable a malformation.

H. E. W. Barnes, M.D.

Macksburg, Iowa.

State Medical Society of Virginia.

Ed. Med. and Surg. Reporter:—

The State Medical Society of Virginia, which lately held its twelfth annual session at the Fanquier White Sulphur Springs, had a good attendance; the average number is about fifty Fellows, among whom may be mentioned, Professors Hunter McGuire, and James, of Richmond, L. B. Edwards, editor of the *Virginia Medical Monthly*, Drs. Dabney, of Charlottesville; Jackson, of Norfolk; Fauntleroy, of Staunton; Bedford Brown, of Alexandria; and Prof. I. L. Cabell, of the University of Virginia, President of the National Board of Health.

Hon. James M. Brooks, an eminent lawyer of Warrenton, delivered the address of welcome. It is to be regretted that so few papers on medical and surgical topics were prepared for the occasion. Dr. Bedford Brown's, on "Infantile Pneumonia"; Dr. Taylor's, on "Abdominal Surgery," for which he received a fifty dollar prize, and Dr. Elzey's, on "Alcohol," for which was also awarded a prize for the same amount, were all excellent productions. Dr. White, of Richmond, and Dr. McKenzie, of Baltimore, both youthful, described diseases of the eye and ear with marked ability.

The resolution condemnatory of the action of the New York Medical Society admitting irregular and homœopathic physicians to membership, contrary to the spirit and letter of the Code of Medical Ethics, which governs the profession in the United States, was unanimously adopted.

The society adjourned to assemble next year, as the guests of the proprietor of the Rockbridge Alum Springs. Whether such precedents for the sober-minded M.D.'s (usually so at home) to convene at fashionable watering places, will prove advantageous, is questionable.

Nous Verrons.

News and Miscellany.

Pharmacy and Malaria.

The Boston *Journal of Chemistry* says that at a recent banquet of the Illinois Pharmaceutical Association, Mr. E. S. Baldwin, an editor, responding to the toast of "The Press," and referring to old times, said: "It did not then take a student two years at a pharmaceutical college to learn that when he could not read what the doctor had written he should put in aqua pura, syrup simplex, and podophyllin. No, sir; this blessed system was not invented then. When we remember what our ancestors suffered on our behalf, we no longer wonder that they had rugged constitutions, or that we have been permitted to enjoy the effect of their tonics in the shape of hereditary dyspepsia. . . . On entering a modern drug store, you walk boldly up to the be-moustached and be-jeweled clerk. If you know your business, and it is a temperance town, you wink at the fellow, and say something about malaria. It is a matter of indifference just what you say. The single word 'malaria' is the golden open sesame. . . . Whenever I see a man coming out of a drug store, and wiping his mouth on the back of his hand, I realize to its full and awful extent the hold that malaria has on this unfortunate people. What the drug stores in towns where a strict license law prevails would do without 'malaria,' is a hard problem."

Science on the Stage.

From the Boston *Journal of Chemistry* we learn that it is proposed to try a novel experiment at Paris, by producing a series of scientific dramas at one of the theatres, with the object of combining amusement with instruction. Three plays have already been provided, and their titles clearly indicate the direction in which the audience is to be instructed. The titles are: "Denis Pepin, or the Invention of Steam;" "Kepler, or Astronomy and the Astrologer," and "Gutenberg, or the Invention of Printing." The result of this new dramatic venture will be awaited with interest. Its success may be the inauguration of a new era in science teaching. A most excellent idea, which we hope will be carried out.

Egyptian Treatment of Syphilis.

In the course of an article on "Medical Notes of Travel in Egypt," by Dr. Josiah Williams, in the *British Medical Journal*, occurs the following:—

The native treatment of syphilis in young girls is very primitive and very barbarous. Close to the town (Souakin) in the Red Sea, is a little island, called originally Sana Gin, and from which the town takes its name. The girl is taken across to this island by six women; she is then laid naked on her back; on each arm and each leg sits a woman, another on her chest. The operator, another woman, who is provided with a sharp sea-shell, scrapes away in the vagina until she is satisfied that all diseased parts are removed, and then, utterly regardless of the shrieks of the girl, gets a handful of sand from the sea, and rubs that in. The disease is then supposed to be cured, by this rather rough operation.

Sydenham.

Of Sydenham, Dr. Oliver Wendell Holmes says: "He had his hypotheses, like others of his time; he talked about the humors, as preceding generations had done; but he kept his eyes open, he watched the progress of disease, he noted the influence of times and seasons, he recognized the meaning of the efforts of nature in the cure of disease. He ordered free ventilation for diseases in which the patient had been "stifled in bed;" he directed horseback riding for consumptives; he prescribed a roast chicken and a pint of canary for a nervous young man whom the pedants and the pathologists of his day would have probably bled and drenched; in short, he was a man of excellent judgment and much more than common sagacity, and did not allow his theoretical speculations to blind him to the facts of disease before his eyes. It is almost two hundred years since Sydenham died,

but there is wisdom in his writings which never grows old."

A Drunkard's List.

It is announced, in the *Journal d'Alsace*, that, in pursuance of a recent decree, the authorities of the Haute Alsace have issued a list of the drunkards in the town of Sainte Marie aux Mines and the neighborhood. The number of these persons is thirty-one; the youngest being twenty three years of age, and the oldest sixty-eight. Innkeepers and others are, in future, forbidden to sell intoxicating drinks to any of those who are thus advertised.

An Enterprising Undertaker.

The *British Medical Journal* says that an enterprising London undertaker has issued a circular to medical men, asking for introductions to funerals, and offering commissions. The *Journal* very properly remarks that this is an insult to those to whom it is addressed, and will certainly tend rather to injure than benefit the party in question.

Pathological Society.

At a stated meeting, held Thursday, October 12th, 1882, the following officers were elected: *President*, James Tyson. *Vice Presidents*, J. Solis Cohen, E. O. Shakespeare, F. P. Henry, J. B. Roberts. *Secretary*, P. Skillen. *Recorder*. C. B. Nancrede. *Treasurer*, M. S. Meech. *Curator*, Carl Seiler.

The Age of German Medical Colleges.

From the Chicago *Med. Jour. and Ex.*, we learn that the University of Prague was founded in 1348; Vienna 1365; Heidelberg 1386; Leipzig 1409; Frieburg 1454; Griefswald 1456; Basle 1460; Munich 1472; Jenna 1568; Wurzburg 1582; Gottingen 1737; Berlin 1810; Zurich 1833.

Items.

—In England, during 1879, 308 deaths out of a total of 271,496 were ascribed to eczema.

—Dr. Luigi Concato, the celebrated Professor of Clinical Medicine at the University, Turin, is reported to have recently died.

—The death is announced of the celebrated chemist, Professor Wöhler, of Göttingen, at the age of eighty-two.

—The circulation of the *British Medical Journal*, at the last Association meeting, was reported as 11,000 copies weekly.

—Blackmore says: "The common lay mind hates the lawyer, as the lay body objects to the doctor, and the soul is timorous of the parson."

—An anti-vaccination society has been formed at Hartford, Conn. About a dozen persons constitute the organizing membership.

—A combination of ergot, belladonna and iodide of iron is strongly recommended in juvenile nocturnal urinary incontinence.

—Cannabis Americana, locally applied, is the latest treatment for "reasoning mania." The fibre is the part preferred.

—It has been decided in Paris that there can be no binding agreement between a patient and his doctor, the former not being regarded as a free agent.

—There are now only nine states without Boards of Health, and Pennsylvania and Ohio are the only large ones among them. For shame!

—Mrs. Nathanial Montefiore has given £2600 to University College Hospital, for the endowment of two beds, in memory of her late brother, Sir Francis Henry Goldsmid, Bart., and her late son, Mr. Leonard Montefiore.

—Dynamogen is the name of a new explosive, invented by M. Petri, a Vienna engineer. If the enthusiastic claims of the inventor are not an exaggeration of its merits, it will certainly prove a dangerous rival of gunpowder.

OBITUARY NOTICES.

Dr. George A. Ward died at Cerro de Pasco recently. He served as surgeon during the American war, and was, for many years, a professor at Yale College.

QUERIES AND REPLIES.

Mr. Editor:—Believing that the REPORTER is read by a greater number of physicians than any other medical journal in the United States, I ask for information from that great body as to the results, in their experience, of the *hypodermic injection of Morphia* or other medicines *in veins*. Have any of your reader ever observed fatal or very serious effects from this accident? W. S. F., *Md.*

MARRIAGES.

AULDE—McILHENNY.—On Thursday evening, September 28th, 1882, at the residence of Benjamin Jacobs, Bridesburg, by Friend's ceremony, John Aulde, Jr., M.D., and Emmie McIlhenny, all of this city.

BOBERTS—WALLACE.—At the residence of the bride's parents, in the North Highlands, Sept. 20th, by the Rev. R. M. Roberts, the groom's father, assisted by the Rev. Robert Kay, L. G. Roberts, M.D., of Bedford, N. Y., and Miss May A. Wallace, of the North Highlands.

BRUNNER—BAUS.—Tuesday, October 10th, 1882, at the residence of Mr. Joseph Rosenbaum, 2139 Green street, by Rev. L. Y. Graham, Edgar P. Brunner, M.D., and Miss Amelia D. Baus, all of Philadelphia.

DARLINGTON—GARRETT.—On Thursday, September 28th, in the presence of the Mayor, at the residence of the bride's parents, Horace H. Darlington, M.D., of Concordville, Pa., and Kate C. Garrett, of Wilmington, Del.

POWELL—SHUMAN.—October 11th, 1882, at the residence of the bride's parents, by Rev. Richard Searing, Wm. R. Powell, M.D., of New York, and Miss Mary Shuman, of Columbia, Pa.

SAURMAN—SHELLEY.—On October 3d, by Rev. Mr. DeMoyer, assisted by Rev. Mr. Stewart, Dr. B. F. Saurman, of Boston, Mass., formerly of Norristown, and Miss Leonora M. Shelley, of Ashland, Pa.

DEATHS.

COXE.—At Baltimore, Md., on Friday, Oct. 13th, Ernest Cleveland Coxe, M.D., aged 32 years.

HOWELL.—In this city, on the 10th instant, Benjamin P. Howell, M.D., in the seventy-fourth year of his age.

THE

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Communications.

LIGATION OF PEDICLE AROUND DRAINAGE TUBE IN EXTIRPATION OF THE WOMB.

BY J. M. F. GASTON, M.D.,
Campinas, S. Paulo, Brazil.

Abdominal surgery has made such advances in these latter years, that operators are prepared to undertake risks which would not have been warranted in former times.

Excison of the kidney and bladder have been practiced with impunity; portions of the intestinal canal have been removed and the track continued by uniting the remaining free extremities. The extirpation of the ovaries, with the fallopian tubes, is becoming common; and ablation of the womb, whether in the gravid state or diseased, is recognized and practiced generally. So that it becomes the medical profession to investigate the conditions for safe procedure with this class of surgical cases.

The aim of every operator should be to avoid all the accidents which prudent forecast can prevent, in every surgical case; and the present inquiry is more especially directed to averting the bad consequences which are developed in hysterotomy, whether this be limited to a part, or extended to the entire organ. There has existed heretofore a difference of opinion and a divergence of practice as to the propriety and expediency of drainage in laparotomy; and the results of the various modes of proceeding have not tended to relieve the matter of the doubts which gynecologists have in regard to drainage in uterine surgery.

Under the widespread influence of Listerism during several years past, it is not a matter of surprise that the preconceived views of medical men should be unfavorable to the use of drainage tubes, which, at the same time that egress to noxious matters is afforded, give an opportunity for the entrance to a great or less extent of atmospheric air, with those impurities which have been considered a fruitful source of bacteria. But a new era is dawning upon prophylactic philosophy, and the hotbed of germs does not inspire so much dread now as the heavily charged vapors of carbolic acid diffused in a room with the delusive idea of rendering nugatory and inoperative the products of these miasms. This vain search for the invisible cause of trouble, which has brought greater trouble in its train, is fitly illustrated by a notable result in the experience of one of our most distinguished gynecologists, in one of our largest centres of surgical enterprise in America. With a view to have an operating ward put in the best possible condition for receiving cases of females for abdominal operations, the dingy walls were brightened and purified by a fresh coat of paint. What happened to the patients does not appear, but it has transpired that the operator received such an impression from the white lead and essence of turpentine, that he was disabled for weeks, from his detention during several hours in the said ward while giving his attention to an important surgical case, doubtless aggravated by the inhalations of carbolic vapor.

If the germ theory be well founded, all sort of contact with the atmosphere should be carefully avoided in any surgical operation what-

ever ; but the results of experience on the part of some of the most distinguished gynecologists lead to the conclusion that atmospheric air is not such a bad thing as to require that it should be mixed with carbolic spray ; and it is found that occasional contact of a wound or ulcerated surface with the atmosphere is not productive of serious consequences, notwithstanding what may be intermingled with its normal proportions of nitrogen and oxygen.

Should it appear, upon more ample investigation of the causes of blood poisoning after surgical operations, that the offending element develops within rather than from without, it may devolve upon the operator to look rather to eliminating promptly this *materies morbi* than to shutting the door to its escape by closing every outlet for a discharge from a wound. If the ordinary observation as to the mode of restoration in external parts holds good for the incised or lacerated wound of internal parts, it must be clear that in cases suited to the plan of occlusion, the union by first intention, or by plastic adhesion, must ensue, and failing to effect this most salutary process, the closure of any outlet becomes an obstacle to the cure by suppuration. The radical point for decision in the wounds of deep-seated tissues, is, whether they are likely to be aggravated by leaving a channel of escape for the hurtful elements, in all such operations.

It is evident, from the microscopic observations of Klebs, made in 1870, upon the results of gunshot wounds, that micro-organisms play an important part in the degeneration of the vital tissues ; and the demonstrations of Cheyne go to prove that, while many acute abscesses may, no doubt, be caused by micrococci, yet, in some cases, they must be regarded as accidentally present as the result of some state of lowered vitality of the general system. Even Lister allows that many inflammations, more especially chronic inflammations, are caused by the nervous system, and cannot, in any way, be attributed to the presence of micro-organisms.

Thus it appears clear that we are not to seek *ab extra* for the explanation of the various degenerations of structure which occur as the consequence of surgical interference, and that the scarecrow of atmospheric germs is not a sufficient reason to seal up, as it were, hermetically, every wound that may result from accident, or in the course of an operation upon deep seated parts.

The real source of septicæmia is most certainly in the absorption of decomposed fluids that cannot find their exit ; and it would, of course, forestall such a poisoning of the blood to allow, under all circumstances, a free evacuation of such disorganized matter by drainage.

Should there be no effete matter present, there could be no indication for a discharge, yet an open channel of escape can do no harm.

If the thief should have entered the house by some undiscovered route it may be well to raise the alarm, and leave a door open for his escape.

Two cases of rupture of the womb reported by Morsbach and Graefe, in which drainage by the vaginal canal was attended with salutary results, lead to the inference that a drainage tube may be used advantageously through the neck of the womb or through the vagina, under other circumstances than in accidents of this nature.

In the case of Morsbach "it was discovered that there was a rupture of the vagina and cervix uteri, and that the child was in the abdominal cavity, except one foot, which was within the uterus. The foot was seized and the rent carefully enlarged by numerous small incisions with scissors, till it would allow the child to be extracted. The hand was then inserted and the placenta, which was in the peritoneal cavity was removed. Two thick caoutchouc drainage tubes were put into the rent, and a pad of salicylated wool between the thighs. Slight pyrexia followed, lasting a little more than a week, with abdominal tenderness and tympanites. One drainage tube was removed the next day, and the other on the fourth day. The patient got up on the fourteenth day."

In the other case, reported by Graefe, "the uterus was found ruptured transversely, only about three fingers' breadth of its wall remaining entire.

"The peritoneal cavity contained much clotted blood and meconium. It was washed out with a 2½ per cent. carbolic acid solution, and then a thick drainage tube, thirty centimeters long, put into the abdomimal cavity and secured by a silk suture to the posterior commissure.

"After the sixth day the parts were irrigated from one to three times daily, through the tube, with a 2½ per cent. solution of carbolic acid. The tube was removed on the thirtieth day."

These cases being of much gravity, and ending satisfactorily, with the thorough drainage by tubes of large calibre, in one of which it was kept up continuously for a month, must go very far towards convincing gynecologists that the cavity of the peritoneum cannot only be washed out from time to time, but can be exposed to contact with the atmosphere without inducing

inflammation or disorganization in its delicate tissues. In both instances the child escaped into the abdominal cavity, and hence there could be no doubt of the laceration of the peritoneal sac, nor could there be any misapprehension in regard to the entrance of the drainage tube within its cavity, so that each case affords a fair illustration of the application of drainage through the neck of the womb in similar operations upon the abdominal cavity. The incision of the external wall of the abdomen does not present such a complication as to set aside the inference from its use in the graver conditions of laceration of the uterine fibres and the investing membrane.

If the abdominal cavity can be washed out with a 2½ per cent. carbolic acid solution, as was done in Graefe's case, and this same cavity left in free communication with the external atmosphere by a thick and long drainage tube, extending outside of the vulva, it goes very far toward setting the matter at rest in regard to the good result of drainage in this class of cases, and at the same time authorizes the reasonable expectation of it in all operations involving the peritoneal and cellular tissues within the cavity of the abdomen. It is well known that the complete exclusion of the atmosphere from any cavity in which blood may be effused favors its absorption without entering into decomposition, and that coagulable lymph may be assimilated under the action of the adjacent parts when shut off from the external communication with the air; yet, withal, serous collections within the peritoneal cavity, as a rule, give trouble, and purulent discharges from any injured surface are liable to be absorbent and induce septicæmia. In view of these unfavorable terminations after operative procedure, it devolves upon the surgeon to provide against such a contingency, and to discover the means of preventing the noxious influence of decomposition within the peritoneal cavity. But it is claimed that this tendency to disorganization does not manifest itself when operations upon the abdominal cavity are accompanied with proper precautions, and that the few cases in which it becomes developed do not authorize the adoption of a measure that is only requisite for these unfavorable results.

This reasoning would be sound if it were practicable to determine in advance the circumstances which lead to such consequences. But the data upon which to form such a judgment are deficient, and when an operation is completed under the observance of every antiseptic rule, there still follows untoward changes that end in decomposition and blood poisoning. These instances are avowedly beyond the reach of correction while the cavity is occluded; and it becomes a question whether to resort to some mode of treatment from the outset, that will obviate such a termination in any case, or to continue a course that must subject a portion, however small, of the cases to this unforeseen evil.

Laparotomy has been divested of many of the dangers which were its constant attendants formerly, and yet fatal consequences ensue, which timely measures might avert, while in others, the resort to evacuation of disorganized fluids, after constitutional disturbance has set in, has afforded such signal relief as to guide us in the future. Should the operator await such developments, or anticipate them by the adoption of a preventive plan of treatment? If it is satisfactorily established by the large proportion of cases in ovariotomy without any drainage, that a change in the mode of procedure would be unwise, this, still, cannot be said of the operations for the removal of the womb and its appendages; and it is here that we may reasonably look for benefit in a judicious application of a drainage tube through the neck that remains, or through the vaginal canal, in complete ablation.

The recent operations for extirpation of the womb with carcinomatous disease of the neck, practiced by laparotomy and through incisions of the vaginal wall, without drainage, and attended with good results, are very creditable to their respective authors, the former being done by Spencer Wells, and the latter by Fenger; yet these are isolated cases, and it is well known how the accumulation of cases changes the inference from statistics. It is worthy of remark, in connection with the success attending these two first excisions for disease of the neck of the womb, that the first only of Olshausen's four cases operated upon through abdominal incisions gave promise of being a success; yet "in this case malignant disease recurred in five months, and death followed sixteen months later;" while this operator cautions us against Bardenheiser's successful results after drainage, it is, he states, "in just such an operation as this that drainage is actually efficient, since in these cases blood and secretions come into contact with but a limited and acceptable part of the peritoneal cavity; and it must be maintained as effectually as possible during the last few days before it is dispensed with, since, when the opened surfaces of peritoneum are about to close, that is just the time when the

peritoneal cavity must be left free from fluids that may cause infection." This testimony of Olshausen in favor of drainage, being the result of a large experience in this operation, is most valuable.

Schröder's experience in this class of cases has been satisfactory, and he uses a heavy drainage tube, resting in the ununited peritoneal and vaginal wound, being retained in position by salicylated cotton wound around it. The results of Freund's extirpation of the womb, with drainage, are also encouraging, and in his view "the danger of the peritoneal aperture is no longer to be considered; indeed, that the keeping open of the peritoneal wound is highly desirable." The advantages of drainage in operations for extra-uterine pregnancy cannot be urged as a legitimate illustration in favor of it for other cases, when the treatment involves the consequences of fresh incisions; yet the untoward results of the occlusion, such as practiced by Goodell in his case, reported to the Obstetrical Society of Philadelphia, June 2d, 1881, should serve to guide operators in the future management of these cases. Tait's report in the "Removal of Uterine Appendages," in the January number of the *American Journal of the Medical Sciences*, presents a result, in case No. 1 of the series, that exemplifies completely the benefits of drainage in abdominal surgery. It is stated that "for about a month after the operation the cavity discharged freely, but then the opening began to close, and the patient suffered much pain. I, therefore, passed a double drainage tube through the cavity, and left it there about six weeks; I then removed it, and the whole track closed in a few days, and this patient remains to this day perfectly well."

A case reported by Thomas, to the Obstetrical Society of New York, April 5th, 1881, illustrates well the benefits of drainage, as the piecemeal steps by which the tumor was removed, and the violence inflicted by the forcible application of the clamps, might have been expected to induce serious consequences, in the unfavorable condition of the patient; yet, with proper drainage, even "the portion of the uterus caught in the clamp sloughed out entirely, and the cavity granulated from the bottom."

On the other hand, a similar case, reported by Dawson, Dec. 6th, 1881, in which drainage was not used, terminated fatally, and "on examination of the wound after death, it was found that the pedicle at the upper portion had adhered to the wound, but the lower angle of the wound was sloughy. Dr. Dawson believed that death was caused by septicæmia, due to the slough following the excessive traction and the pressure from the clamp." But the outside observer who looks impartially at the progress and result of this case, will not fail to perceive that the want of an outlet to the vitiated matter was the cause of the trouble. which might doubtless have been averted by a timely resort to the drainage tube. On the fifth day after the operation "the patient vomited, had diarrhœa, followed by chill, and died a few hours afterwards." If gynecological surgeons would act upon the time-tried precept "that an ounce of prevention is worth a pound of cure," it would save them from mourning over spilled milk, and of repenting, when it is too late to correct the omission of drainage.

The favorable results obtained in many cases, after threatening symptoms have made their appearance. by the adoption of drainage, should encourage the resort to some means of escape for decomposed fluids as a prevention of septic development. Not that a large extent of surface needs to be exposed, for this could not be requisite for the end in view. But some provision for discharge of vitiated matters is certainly indicated in the majority of operations implicating the serous and cellular tissues. If adhesive inflammation in all cases could be certainly counted upon, then, of course, there would be no exudation of fluids to enter into decomposition, and consequently no necessity for any outlet. But the plastic elements of the blood are not invariably disposed to form coagulable lymph, and when degeneration or perversion may ensue, cannot be uniformly anticipated. It thus turns out that we must provide against these cases in advance, and not leave the system to suffer from vicious absorption of fluids that nature seeks to eliminate, and which will find a way of escape if an outlet is left for them. The results of this open treatment of wounds by the German surgeon, Burow, with the use of the argilla acetici as an antiseptic, goes to prove that it is not the influence of the air upon the surface of the tissues involved that is to be counteracted, but the decomposition set up in these tissues which requires correction.

With these practical deductions from the results of experience we may put theory aside and proceed with the execution of such measures as offer advantages in the management of this class of cases, that present peculiar embarrassments to the operator. The difficulties connected with ablation of the womb arise chiefly from the mode of disposing of the pedicle when made through the cervix, and the process of subse-

quent treatment when complete extirpation is required. It will be allowed by all that any plan that may be effectual in securing the incised parts against hemorrhages, and provide for drainage, without any risk of septic developments, ought to commend itself to the consideration of gynecologists. I have, therefore, to suggest the ligation of the pedicle around a metallic tube passed within the canal, if through the cervix, or in the upper part of the vagina, when complete extirpation is requisite. This presupposes laparotomy; and while there are some cases in which the vaginal operation for extirpation of the womb may be expedient, it is generally preferable to proceed with the operation by an opening through the abdominal wall, thus affording a better guarantee for the removal of the organ with all its dependencies. Having made the necessary incision, and ascertaining the parts to be divided in separating the womb, the tube may be passed from the vaginal canal, within the portion that is to remain, and a strong silk ligature may be carried around the tissues, in such a manner as to secure them, outside of the tube, and thus firmly knotted, with the ends remaining each a foot long, to be carried outside of the abdominal opening and held by an assistant. With strong, curved scissors the tissues are to be divided immediately above the upper extremity of the drainage tube, so that the surface of the pedicle shall be on a line with the margin of the tube, thus admitting of a free outlet of any discharge. Should it occur that, in the separation of any collateral parts, vessels are divided which require ligation, the ends should be left, one for each ligature, sufficiently long to pass out through the drainage tube, with the two extremities of the cord that secures the pedicle, and thus carried together through the vagina and out at the vulva, to be tied with a tape around one of the thighs of the patient. If any blood remains in the pelvic cavity, it is to be sponged out with carbolized sponges; and afterwards an oblong carbolized sponge, with a thread passed through it, is to be drawn down into the tube, having the extremity of this thread fastened to the tape with the ligatures. All being thus secured, the external incision in the abdomen is to be closed, while the walls are pressed steadily and fixedly by assistants on each side, so as to expel completely all the air from the cavity. A compress with carbolized oil is to be maintained over the line of sutures in the external incision, and another placed over the vulva so as to preserve the labia in close contact. In this manner it may be expected that union by first intention will be effected promptly in the abdominal incision, and that drainage will be effectually secured.

It is requisite to have the tubes of different calibre, corresponding to cervical and vaginal canals, as the operation may be through the neck of the womb, or excision below the os uteri, through the vaginal canal. The cylinders of either kind should have a circular depression in the external surface, at a distance of half an inch to an inch from the upper extremity, according to the case, in which the ligature is to be fitted when it is tightened around the pedicle. With the intervening tissues which become separated gradually by the pressure of the ligature, there is formed an annular mass, which is retained in the loop resulting from the passage of the extremities through the circle of the ligature, so that, at the end of six days, the tube may be drawn downward until its upper end is on a level with the original line of ligation, and by drawing upon the protruding extremities of the ligature, this band of dead tissues will come away with the ligature, through the tube. The ligatures securing vessels within the pelvis may be left for a longer period, if it be thought necessary, drawing lightly upon each of these daily.

The sponge within the tube, having a thread by which it can be withdrawn, may be renewed daily, and if it should be found impregnated with foul discharges, a 2½ per cent. carbolic acid solution could be thrown up into the cavity and allowed to escape, so as to wash away any decomposed fluids, before replacing the carbolized sponge, or a plug of old linen, which may be more conveniently applied.

The lower margin of the tube should have a perforation through which a strong ligature is looped, and this of sufficient length to pass out of the vaginal canal, so as to be held by the hand of an assistant, when various manipulations are made, thus preventing the tube from moving upward; and this loop should also be fastened to the tape around the thigh in the intervals between dressings, with a view to prevent the escape of the tube into the abdominal cavity when released from the encircling ligation by the shrinking or division of the tissues. It will be observed that, at the outset, three separate classes of cords pass out at the vulva—the main ligatures around the pedicle, those used for tying the vessels within the cavity, and that attached to the lower rim of the drainage tube—all of which are to be fastened to the securing tape around the thigh. The first named

comes away before the others, and the last remains so long as the tube is continued in use for drainage.

After the detached band of tissues from the pedicle has been removed, the tube may be lowered in the canal, whether of the cervix or the vagina, so as to allow the circular raw surfaces to approximate and thus gradually close the opening into the cavity of the pelvis, as it is desirable that complete occlusion be effected when there is no longer any discharge. It will be found advantageous to give the tube intended for the cervix a slight anterior curve at its lower extremity, so as to adapt itself to the relation of the os uteri with the upper part of the vaginal canal when in position.

This curve should correspond very nearly to that usually given to the internal part of a tracheotomy tube, and the other straight arm of the drainage tube, which is to enter the canal of the cervix uteri, corresponds in its relation to the curve to that of the straight portion of a catheter to its curved part in the former, being each proportionally shorter, to adapt it to the surroundings.

In an emergency, a pair of the largest calibre of tracheotomy tubes could serve the purpose of drainage through the neck of the womb, filing away the fastenings from the outer cylinder, and placing the circular shoulder in contact with the os uteri, while the inner cylinder might be plugged with the carbolized sponge, or strip of old linen, being removed as often as requisite for washing out the cavity, and thus facilitating the changes of the material within the tube.

A carbolized sponge, or roll of carbolized cotton, may be impacted against the lower extremity of this extemporized drainage tube, thus maintaining it in its proper position, and this being shut up in the vagina by the action of its sphincter. With a dressing thus made, there would be no communication with the external air, except when the sponges were changed, and the parts being then washed out with a carbolic acid solution, it is presumed that even the most zealous of the advocates of antiseptic measures could not take exception to this proceeding.

In operations upon the eve of delivery, when the os uteri is already dilated, the diameter of the tube may be from a half to three-fourths of an inch; whereas, in those for the ablation of the unimpregnated womb, when the neck is in its normal state of contraction, the diameter of the tube must be less than half an inch, according to the necessities of the case, as observed by previous exploration. The cylinder which is adapted to the excision through the upper part of the vaginal canal does not require to be curved, and should have a diameter exceeding three-fourths of an inch, to be regulated by the circuit of the vaginal wall at the point of selection for the ligature. It is desirable that it should adapt itself smoothly to the exterior surface of the tube, without folds or wrinkles, under the closing of the ligature. As the length of the curved tube suited for the neck depends upon the extent of the pedicle, so as to descend for about an inch and a half below the opening of the os uteri; so the length of the cylinder for the vaginal operation must be modified according to the length of this canal in each individual case, so that its lower extremity shall be retained within the sphincter vaginæ. Thus it is clear that the operator must determine for himself the dimension of the tube or cylinder which may be requisite for the individual case, and it is hoped that the description given may enable any who approve of my suggestion to put it into execution. It should be understood that, in advance of any application of the ligature around the pedicle, the womb should be drawn forcibly upward, so as to put the vagina on the stretch, and at the same time bring the cervix uteri well above the bladder, thus facilitating the division of any adhesions with its wall, which must in all cases precede the incision through the tissues of the vaginal canal.

With this process of ligation around a metallic tube within the cervical or vaginal canal, it will be perceived that the obstruction of the circulation must be more effective than simply encircling the tissues. With a solid body within, the pressure will be secured by the ligature drawing upon the thin layer in contact with the tube throughout the entire circumference of the part enclosed in the loop, and the strangulation being carried to any extent that may be desired before tying the knot, will lead certainly to the detachment of the portion above the ligature within the specified period of six days. The death of this band of tissue is not likely to contaminate the adjacent parts under the use of daily ablutions with carbolized solutions until it is brought away through the tube with the surrounding tape ligature, and no further danger is to be anticipated from any other source.

The inconvenience of securing the pedicle in the external abdominal incision, as in Porro's operation, may be entirely obviated by this mode of treating it; and the embarrassments growing out of Taylor's plan of dropping the ligated pedicle, cannot ensue from this.

In view of the facility thus afforded for a thorough drainage and disinfection, excision of the womb must be freed from risk of septicæmia.

It is claimed that the adoption of this process would have the following advantages:—

1. Security against hemorrhage, primary or secondary, by the constriction of the tissues around the tube.

2. Efficient drainage and disinfection of the cavity.

3. Prevention of subsequent irritation by the removal of all ligatures before completing the cure of the case.

4. Maintaining the pedicle in its natural relation without any tension upon adjoining parts.

5. Closure of external incision by first intention, with the least possible delay.

6. Obviating the ordinary tendency to septicæmia.

If I am correct in attributing to this plan of operating a superiority over other modes of securing the pedicle, it is worthy of adoption.

This suggestion has been presented to the consideration of Mr. Spencer Wells, of London, and to that of Drs. Nathan Bozeman and J. Marion Sims, of New York, each of whom, without any endorsement of the proposed plan, encouraged me to present my view of its advantages to the medical public. In a letter of October 14th, 1880, from Dr. Sims, touching this matter, he remarks, "If a case should occur to me in which I thought your method would answer, I would adopt it, of course." As yet known, there has not been any application of it in the human subject, and it is simply with a view to bring it to the attention of gynecologists and surgeons generally, that this description is given, so that its merits may be tested by trial in some case suited to its use.

INCISED WOUND OF THE ABDOMEN, WITH PROLAPSUS OF THE INTESTINES.*

Translated from the Spanish.

BY AUGUSTIN M. FERNANDEZ, A.B., M.D.,
Of New York.

I. A. Guerra, a colored man, was wounded in the abdomen with a dagger, on the evening of February 20th, 1882, and brought on foot to the House of Emergencies (*Casa de Socorro*, literally, house of succor), of the 4th district of this city (Havana), a distance of about four squares from the place of the assault. The surgeon on duty, Dr. Edwardo F. Plá, gives the following account:—

"I. A. Guerra walked in at about 9 P.M., having a large wound on the right side of the abdomen, which was bleeding profusely, and allowed the passage of a large portion of intestines. The knife had entered the right side of the abdomen, at the anterior extremity of the eleventh intercostal space, its point coming out at the opposite side, one and a half centimeters distant from the synchondro-costal border, there forming an irregular V-shaped wound, the second branch of which had been caused by the sudden withdrawal of the knife; through this aperture there was hanging a piece of epiploon. I examined both wounds carefully, and finding the protruding parts to be intact, replaced them in position, and put nine sutures with thick vegetable (hemp) ligature to the anterior wounds, and two to the posterior one, taking in all the muscular as well as the tegumentary coats. The anterior (*i. e.* the lower) wound was almost horizontal, and of ten centimeters in length."

Diagnosis.—The question of any abdominal viscera being injured was undecided.

Prognosis.—Death.

Treatment.—Besides the proper attention to the wounds, Dr. Plá ordered an opiate, ice water compresses, rest in bed, and absolute abstention from all kinds of food.

February 21st, A.M. The patient is alive, and his strength, voice and intelligence are perfectly normal. He complains of pain in the posterior wound. There is diarrhœa. Pulse and temperature normal. The dressing was removed, and the wounds bled very little. The opiate prescribed by Dr. Plá was ordered to be continued, and the compresses of ice water substitued for compresses wetted with ice-cold "*áqua de la pildora*,"* to which a few drops of laudanum were added. Only small doses of chicken broth allowed as nourishment. Evening of the same day. A little coughing, of no consequence. The diarrhœa continues. Temperature 38° C.

February 22d. Wounds again dressed. No material change. Temperature 37.5° C. This condition continued throughout the night.

February 23d. The pain has disappeared. Four sutures of the anterior wound, and two of the posterior one are cut off. The diarrhœa continues. Temperature 37.2° C.

February 24th. No change. A blood clot,

* This very interesting case was reported in the *Cronica Medico Quirurgica*, of Havana, Cuba, June, 1882.

* This is an empirical Cuban preparation. It is composed of pure water, to which a few grains of the sub-nitrate of mercury are added. (*Obs. of the translator.*)

which had been forming in the posterior wound, came out. Two more sutures of the anterior wound are cut off. The diarrhœa continues.

February 25th. All continue the same as the day previous.

February 26th. The last sutures are cut off. The anterior wound is almost cicatrized, and the posterior one only lacks union for a distance of about one centimeter in its centre. The diarrhœa has disappeared.

March 3d. No material change has occurred during the four days past. The posterior wound is already cicatrized, and the anterior one only lacks union in its centre.

In the report sent to-day to the civil authority, in whose hands the prosecution of the assailant rests, it is stated that, eleven days having elapsed since the time of the stabbing, there is reason to believe the danger from the most serious complications likely to arise in this class of wounds is passed over.

March 4th. Last night the patient had a severe pain all along the track of the wound. There is a little swelling on the right side of the abdomen. The patient has not had a passage from the bowels for two days. The pulse is natural, temperature 37.4° C. There is no change in the countenance. All these circumstances lead me to suppose there is no danger of any serious complication. I ordered a laxative enema and an opiate. Evening of the same day. I dressed the wound again; the pain along its track continues. The opiate has not yet been sent for, but being got, a dose was at once given in my presence. At the second or third dose the pain was relieved. During the night the patient ejected large quantities of gas and excreta. He must have eaten some solid food, against my positive order not to do so, although he denies it. I desired a consultation to be had, so as to clear my mind in regard to the true cause of this slight complication, but the patient refused it. It was afterwards proved to be a flatulent colic, due, probably, to the nature of some ingesta taken.

March 5th. All continue well.

March 8th. No important change during the last three days. Only about two centimeters' length of the anterior wound lacks cicatrization. The patient is nimble, and feels strong; can walk, and is able to get in and out of his suspended cot.

March 10th. Keloid appears. Cauterization with nitrate of silver, repeated every two days.

March 18th. There is complete cicatrization, and the patient is in perfect health.

Such a remarkable case of incised wound of the abdomen, in which there was no peritonitis, no complication of any account, and complete cicatrization in 26 days, is certainly surprising. The tolerance of the peritoneum to such a terrible traumatic injury is wonderful. It is my opinion, therefore, that a simple record of this case, without any commentary or claim to any especial treatment on my part, is sufficient to justify this hastily written report.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINICAL LECTURE BY ALONZO CLARK, M.D.,

Professor of Pathology and Practical Medicine.

Phthisis.

A male patient, about 35 years of age. In answer to questions the patient states that his trouble is lung or throat disease; that he is short of breath, gets out of breath on going up stairs. He can lie on one side as well as on the other; does not have to elevate the head greatly with pillows. These questions were directed to the possibility of there being heart disease, and we do not make anything very positive about it. Now we turn to the lungs. He says he has a cough which troubles him at all times of the day; he raises greenish matter: not enough to fill a teacup in twenty-four hours. He has never coughed up blood. He says his father died of asthma. He does not remember whether he had a cough or whether he spit up blood. Persons, however, do not usually die in a paroxysm of asthma; the disease goes on and on, paroxysm after paroxysm, and there comes then a chronic bronchitis and an emphysema of the lungs, and they are almost always found to die of some intercurrent affection. The asthma has weakened them very much, they have not the usual power of resistance, and when a disease which they might otherwise have withstood assails them they are likely to sink under it. And the fact that his father had asthma, or at least, as he supposes, he had asthma and died of it, renders it very likely that he may have had phthisis. His mother died at a good age, he thinks of dysentery. None of his brothers or sisters died of phthisis. So we do not make much in the direction of possibility of hereditary phthisis.

He has had this cough for two years, and he thinks it is no worse now than it was a year ago; he has not lost weight, but if anything, thinks he has gained some. So we do not get anything very decided out of the rational signs in this direction. That he has had a cough two years makes it presumptive he has phthisis. He has not spit blood; he has not become more emaciated; these are two facts that are on the contrary side, and we have nothing left but to examine the chest.

Disease of the heart I think is rather excluded by the rational signs, but perhaps not positively. There is scarcely any observable prominence in

the region of the heart, as you will see. You can see a slight impulse of the apex against the chest wall, and there is a more apparent pulsation in the region of the epigastrium. The apex should be three inches and a half from the median line and about an inch below and within the nipple. In this case it is a little too far from the median line, being about three inches and three quarters.

I listen here near the base, to ascertain whether there is a murmur at the aortic opening. The two sounds which I hear here are the first and second sounds of the heart, which are perfectly clear; there is no purr, no prolongation, no unusual sound; the same is true when I listen over the apex; so that we may pretty fairly exclude the heart in our diagnosis, with the exception, perhaps, of a quarter of an inch in size larger than it should be. The size of the heart naturally varies with the breadth of the shoulders. If a man is very wide shouldered he may have a heart a little larger than another who is narrow. This man is about average in that regard, I judge.

Now, we will examine with regard to the lungs, and something strikes me at once, as I expose the chest, that is, a very marked shrinkage of the chest on the right side, at the apex, which is very significant. There is quite a large pit upon the right side which you do not see upon the left. As I listen to the breathing I am to determine two things: first, the tone of the respiratory sound, whether it be exalted or flattened; and second, whether the expiration is altered. In a healthy state of things the expiration should be heard to about one-fifth the length of inspiration. Just as it begins you can hear a little murmur, and then it is extinguished. The inspiration, however, you can hear during all the time of its continuance. If there is anything that makes the expiratory sound longer than it should be, it is some condensation of the lung enabling the tissue of the lung to conduct the sounds which are produced to the surface. Then, if the expiration is longer than the inspiration, or if it be markedly prolonged, there is reason to fear that there is consolidation, from some cause. It may be pneumonia, not fully consolidated; it may be a tumor conducting the sound; but in nineteen cases out of twenty, it is phthisis.

This is a Yankee notion, the value of prolonged expiration in the diagnosis of phthisis. Perhaps some of you may have heard of the reputation and far fame of Dr. James Jackson, of Boston, who lived to a good old age, and was greatly respected throughout New England and wherever he was known. He had a son named James, and after he had completed his college education his father sent him to France and put him under the tuition of Mr. Louis. One day, as he was listening to some patients in charge of Mr. Louis, he observed this prolonged expiration. After a little time he had another opportunity, and he observed this prolonged expiration again, in a phthisical person, and after three or four observations he communicated the fact to Mr. Louis, who had not noticed it before, and nobody had noticed it up to that time. Mr. Louis examined some patients and found it to be a valuable indication of physical changes in the chest, so that it is, as I told you, a Yankee notion, discovered, to be sure, in Paris, but by a person destined to live in America; but he died early, unfortunately.

This prolonged expiration we have here. The next point is to ascertain whether the sound of the voice is longer upon this, the right side, than upon the other. Yes, it is twice as loud here, and the tone is a little different. It is a little higher pitched, and has a great deal more volume. Another point, the amount of vibration which the voice produces upon the two sides. I perceive fully twice as much jar on the right side.

There is another evidence with reference to consolidation. That is, the difference in the percussion note on the two sides. It is considerably higher on the right side than on the left.

I also hear the voice quite distinctly, louder on the shoulder on the right side than on the left. I cannot discover a râle. It is an important thing, however, if you can find it.

The increase of resonance I follow to the lower angle of the scapula, and down here I get a new fact; the voice here seems to be extinguished, or seems to come from a distance. It loses all there is in its volume. Now, the question is, what produces that? The most common thing is a pleuritic effusion. It may be that this is below the lung, and that consequently there should be no voice sound here. I have observed that the extent of the healthy lung below the scapula is equal to the width of my hand with the thumb spread, while in this case the point of dullness is found an inch and a half inside of that distance. We find that this side of the chest in this region does not move as freely as the other when he breathes deeply; the amount of restraint in it, however, is not very considerable; still, what there is is worth noting, as it helps us in the diagnosis. This inch and a half of fluid, this shrinkage of the chest, and the movement less distinct upon this side as compared with the other during respiration, are three facts that point to pleurisy. The pleuritic effusion has been greater than it is now, as is pretty evident from the skrinking. He is nearly over it. The fluid has subsided until there remains only about an inch and a half, in a wedge-like form, made by the chest on one side and the sloping diaphragm on the other. The quantity is really very little, and unless it is confined by adhesions I can show that to you. When he leans over the counter I get the voice sound distinctly down to here, which is nearly two inches below the position at which I get it when he stands. We make out, then, that he has or has had some pleurisy. He says, however, he has not had any pain at any time in the side. So we have no evidence there in favor of pleurisy, but still there is water here. That is demonstrated by the fact that there is dullness on percussion at the same line where the voice seems to be partially extinguished in going from above downward, and from the further fact that the side is shrunken, and also from the fact that it does not move as freely as the other on respiration.

We find, then, that he has evidence of con-

solidation of the lung under the right clavicle, and that it extends downward under the scapula to the inferior angle of that bone; that the voice is about natural below that, until we get down about the width of my hand and a little more, and then the voice is extinguished again and dullness on percussion appears. It disappears when he lies upon his belly and comes again when he assumes the erect position. Then the cough, which has continued for two years, almost invariably; if there is much expectoration associated with phthisis, you get a pretty clean diagnosis; phthisis of the right lung, and pleurisy that is probably consequent upon that disease, but now getting well.

Then the question is, what shall we do for him? The secondary disease, pleurisy, is getting well; it will be safe to leave that to itself. If it were not, then some diuretic would help him. And a favorite one with me is the bicarbonate of soda—it is an old prescription, older than I am, a great deal—carbonate of soda, half an ounce; water, six ounces; a tablespoonful of that with a tablespoonful of fresh lemon juice mixed together and taken every two hours; then add a dessertspoonful of the infusion of digitalis three times a day. In three persons out of four it will produce marked, or at any rate, sufficient diuresis to carry off the fluid of the pleurisy when the inflammation has abated. And if this patient should need anything in that line, that would be as good as anything he could take.

Then, with reference to the phthisis, he must build up his system and maintain his strength as long as he can. Two years and no cavity, is perhaps a favorable condition, and the additional fact that he has not emaciated, or if he has, he has regained what he lost, is worthy of being taken into account in the prognosis. You remember, we did not find any positive evidence of hereditary disease of that kind. His father, as you heard, he thinks died of asthma. That certainly is doubtful; there is a greater chance that it was phthisis than asthma, and if so, then there is an element in the prognosis that is of some importance. Inherited phthisis is not as curable as that which occurs spontaneously in the individual. Yet you will sometimes observe that even those who are hereditarily predisposed to it will recover. The common opinion is that consumption is death, or equivalent to it. But in my own observation hundreds, and I do not know but I might say thousands, have been prescribed for in the early stage of phthisis, and have thrown it off wholly.

The treatment is entirely corroborative. There is no specific, and notwithstanding the many advertisements of waters and medicines that will cure the consumption, there is nothing of any value in any of them. The whole thing consists in three or four very plain and simple facts. First, a free exposure to the open air. An indoor occupation is unfavorable to a favorable result. The person should be out of doors. If he is strong enough, w k out of doors many hours of the day. And one means by which he can occupy his time profitably is by riding on horseback. So long ago as when Sydenham wrote, which is two hundred years, horseback exercise has been famous for its favorable effects upon phthisis. Indeed, Sydenham says that horseback exercise will cure consumption as Jesuit's bark will cure the fever and ague. He is reported to have said that horseback exercise will cure consumption if mercury will cure the French pox, but he did not say it. At least, if he said it, he did not write it in his book.

The value of horseback exercise is very well illustrated in a case I had last spring. A young man was getting worse and worse every week, with phthisis. When February came I told him to go to Aiken, hire a horse by the month, and ride every day, twenty to twenty five miles. Of course he could not do that well the first day, or the second day, or the third, for riding, to a person who is not accustomed to it, produces a good deal of soreness of the muscles. He worked into it, and at length after a week or two he was able to ride the prescribed amount, and within a fortnight he wrote that his cough was cured; that he was gaining strength every day. He continued that for about a month or a little longer, and then was so well that, against advice, he insisted upon coming home. He came home and had no cough for a fortnight, but the cough came on in bad weather of spring again, and he has perhaps gained a little during the summer, but still coughs. He ought to have remained longer and taken his exercise there, as prescribed, for a longer period. But we can hardly prescribe that for this man, for, of course, horseback exercise is not a very cheap entertainment in New York. But he can be in the open air; he can sit in the parks.

The next point is the food; oily food is almost essential. Everybody knows the reputation of cod-liver oil in such cases, but the same kind of food can be obtained in other ways, ways that we might almost call more natural. The cow's milk contains, of course, butter, when it is fresh, and that is an oil favorable to improvement in phthisis. I have everybody that has tubercles of the lungs to drink milk, from one to two quarts a day, and in addition, those who are able to meet the expense, a half a pint of cream in the course of the day. The cream, to most persons, is very acceptable, and is for them a very happy substitute for cod-liver oil. The cream is taken on hominy, oatmeal stir-about, baked apples or peaches, when they are in season, and most people think that it adds to the taste and is a luxury.

Then, in regard to solid food, the most nutritious are the best, and there is none better than beef; roast beef, beef steak. I have not come to the feeding of my patients with raw beef, because it is unpleasant to me, and I do not believe that there is any particular virtue in rawness. But to eat well and to exercise sufficiently to secure good digestion are the main points in that direction.

Then I think some virtue can be found in friction to the surface of the body. I do not use counter irritants, as that word is commonly used; that is, no blisters, no moxas, no setons, but friction with dry flannel to the whole body once, or if convenient, twice a day. The flannel is electrical in dry, cool weather, and perhaps there is something stimulating in that, but at

any rate it seems to be about the best thing for applying friction, and it is to be applied to all parts of the body, excepting the neck and face, where it is inconvenient to apply it. The most convenient time is before one dresses in the morning and when he retires at night. This I urge a good deal.

Then, for medicines, nothing but what the particular symptoms require; that is, if a man has impaired appetite, the compound tincture of gentian, a teaspoonful in a tablespoonful of sherry, will often awaken it. I saw an old lady who was dying of cancer of the liver, some time ago, and I advised that she should take the citrate of iron and quinine in lemonade, and when I saw her the next time she said, "Doctor, what a wonderful medicine that was you prescribed for me last week. Before I took it I could not eat anything, and now I have to call the girl up in the night to give me bread and butter." Several of the tonics act favorably in that way, but perhaps the compound tincture of gentian, or the compound tincture of the bark given in a little wine, will be, in the greater number of cases, the best one. How is your appetite? "It is good." Then he does not need anything to help that.

Doctors are very apt to give cough medicines, but almost any cough medicine that is efficacious contains more or less of opium, and the opium, in about half those who take it, impairs the appetite, in the morning particularly, and perhaps all the day. I prefer, when anything is necessary, an inhalation which does not affect the stomach. The inhalation of steam is a pretty good thing. Have the patient breathe the vapor of water for four or five minutes several times in the course of the day. I do not know that it does anything more than soften the mucus and enable the patient to expectorate it more easily, but it seems to be very good. Then there is another inhalation at my suggestion, where the cough is exaggerated, and by that I mean where it is more than it ought to be for the raising of the amount of material that is secreted in the bronchial tubes. It will do it marvelously sometimes. Dissolve two grains of the extract of opium, which has been dissolved before, in three ounces of water, and if you choose, add a very small quantity of glycerine, have that converted into a spray and breathe into the lungs. The little apparatus, with a bulb that is compressed and makes the spray, can be held by the patient himself and the mouth opened. The moment inspiration begins, he compresses the bulb and the spray is thrown into his mouth, perhaps into his face, some of it, and he breathes it in with his breath about seven or eight times in succession. Perhaps I can enforce the value of that point by referring to a case.

A lady came to town some years ago with her daughter. The daughter may have been twelve years old, and she had a cough that was constant. No expectoration in any amount, but coughing every second breath. She did not cough while asleep; that is, she was not awakened by the cough, and that led me to suppose it was dependent upon nervous excitability more than upon the secretion in the bronchial tubes. She went to a hotel, arriving in the city at eleven o'clock at night, and the next morning she brought her daughter to the table, to breakfast, and the cough continued just as before, and directly there was a person speaking to her, that is, to the mother. He said, "I observe that your daughter has a bad cough. I am a physician, have an office in this hotel, and if you come to me after breakfast, I can prescribe something that will relieve her." She said, "No, I came to the city with the intention of seeing Dr. Clark, and I think I had better keep my purpose." And he urged a little, and when the lady went to her room she found a stranger there, a woman, who introduced herself as Mrs. Dr. So and So, and she came to see if the lady, being a stranger in New York, would be aided in any way in her viewing the city or shopping; she would be very glad to lend her assistance to further the aims of the stranger. And the attention was so pressing she concluded she would go and pay the doctor a visit, as that was the thing aimed at by both the Doctor and the Doctor's wife. And she went, and he prescribed for her, and the next morning the cough was all the same, not modified at all, and she concluded she had better keep her first purpose and come to me. I prescribed for her a medicine, an inhalation that has done a great deal of good in other cases, that is, the tincture of balsam of tolu and Hoffman's anodyne, which is ether as you know, mixed in equal parts, and a few drops put into a warm cup. The exhalation is pretty nearly pure ether and the alcohol, with some of the balsam dissolved in it, and that, breathed a few times, will frequently allay a similar nervous cough. I prescribed that, but it did not do. She came back the next morning and coughed the same. Well, I said, now what invention can I make that will just meet this case? She was very sorry to have the Doctor's ears annoyed every morning at breakfast by this cough. Then the thought of dissolving the extract of opium in water, and administering it as a spray, occurred to me, and I prescribed it. The lady came back to me, and she said, "after my daughter breathed two or three times of that medicine you gave her, she had no cough, and she has had none since." Coughs that are in great degree nervous, that is, a cough that is out of proportion to the occasion of it, will yield to that inhalation frequently and very quickly, and I prescribe it very often.

A lady came to me, for example, with pretty marked signs of phthisis. The cough was urgent and I prescribed this, and in a couple of days she came back to say that she was much better. She was not well, but she felt so much better that she flattered herself that the disease was removed.

In general I say cough medicines are not good. Then with reference to the Churchill remedies: I have not learned to have much faith in them—the hypophosphites—and yet I do very often give them, and have it continued for months—the hypophosphite of lime. I do not know that there is any particular virtue in Fellows' preparation. If you have a good druggist you can rely on him for the choice of medicines. So I prescribe, without naming what preparation, the hypophosphite of lime, five grains three times a day.

Lately a new principle seems to be getting some rational foundation, the inhalation of germicides; the inhalation of medicines that will kill the creatures that make phthisis. Some of you, perhaps, do not know that within the last year, not for the first time, however, there has been brought forward very plausible cases going to show that parasites or germs are the source of irritation which produces phthisis, and only yesterday I heard of a case that seemed to have some significance. A gentleman came to me four years ago, having phthisis, and this was before Cox's discovery, and I advised him to inhale the spray of carbolic acid, one drop to two hundred. He got his apparatus and he began to breathe it, and persisted in it, and in a short time, two or three months, his cough left him, and he has since been well. He came to show himself before me yesterday or the day before, and he ascribed his recovery entirely to the inhalation of that carbolic acid, one to two hundred of water. It is not well to prescribe that unless you have some supervision of it. It is somewhat irritating, and you want the means of reducing the strength of the inhalation if it is irritating, and the patient should call upon you pretty often unless he has gotten pretty well under way of it.

But the greatest thing, after all, is full nutrition, exercise in the open air, and the administration of milk and cream.

Editorial Department.

Periscope.

Spasmodic Stricture of the Œsophagus.

At a recent meeting of the New York Medical and Surgical Society (*New York Medical Journal, Obst. Rev.*)—Dr. Francis Delafield narrated a case as follows: The patient was an unmarried woman, twenty-three years of age. He saw her first on the 16th of February, 1882, when she stated that she had always enjoyed good health until eighteen months before. At that time she began to suffer from attacks of severe pain, which was referred to the region of the lower end of the œsophagus. These attacks occurred about once a week, lasted ten or fifteen minutes, and had no relation to the taking of food. They sometimes occurred in the night, sometimes in the day. There were no other symptoms whatever. After three months she experienced difficulty in swallowing solids, and subsequently in swallowing liquids. At length she could take no solid food, and liquids could be swallowed only at times. On some days she could swallow nothing whatever. She starved to a certain extent, but had no other symptoms. Menstruation continued regular, and there were no neurotic symptoms. Dr. Delafield was able to pass a large œsophageal tube into the stomach, and he therefore supposed the case was one of spasmodic stricture of the œsophagus, and at first attempted to treat it by passing the bougie every day, under which she seemed to improve for a time only. On some days she could swallow fluids, but oftener she could not, and as she gained nothing in weight she was taught how to introduce half a pint of milk and half a pint of cream, mixed, into the stomach, through the stomach tube, to be repeated once a day. Besides, she was to try to eat regularly. She had done this since the 9th of March, and during all this time had been able to eat solid food at any time in the day, but it was her custom to eat an ordinary meal for breakfast and dinner, and to take the milk and cream, in the manner indicated, in the evening. From her normal weight of 125 pounds she had fallen to 99 pounds, but after adopting this plan she had gained 14 pounds. It was probable, however, that, like some cases of spasmodic stricture which had been reported, this one would continue for a long time.

Dr. R. F. Weir suggested that possibly the stricture might be overcome by over-distention, as in cases of stricture of the rectum or urethra. An œsophageal tube, with a rubber bulb at the lower end, which could be distended with water, might be arranged for the purpose.

Dr. F. N. Otis remarked that a very slight amount of force would sometimes overcome spasmodic stricture of the urethra, and such might perhaps be the case with the œsophagus.

Dr. Delafield thought that in the so-called spasmodic stricture of the œsophagus there was no particular resistance to the passage of the bougie.

Traumatic Injuries of the Liver and Hepatic Abscess.

Dr. W. S. Elkin has made some interesting researches on this subject in the Pathological Laboratory of the University of Pennsylvania, all the results being verified by Dr. Formad, the microscopist to that institution. He reports them in the Atlanta *Medical Register*. He says, "By a series of careful experiments I think I am able to prove that gunshot wounds of the liver, not involving its large vessels, are not fatal, and that they will heal without the development of any serious constitutional symptoms. Furthermore, I will endeavor to show that we can detect in the pus from liver abscesses, liver cells, which fact will be an invaluable diagnostic point.

Gunshot wounds were inflicted on the livers of large dogs, while irritants were resorted to in the cases of small dogs.

In shooting the animals, care was taken not to wound any of the larger blood vessels of the liver, or injure any of the surrounding organs.

To accomplish this, the ball was made to enter the body of the animal between the seventh and eighth or eighth and ninth ribs, and range so as to penetrate the liver and lodge in the muscles of the back, to the right of the spinal column. The size of the cartridge ball was No. 22, long.

Injections were made in the liver, usually, between the seventh and eighth ribs. The hypodermic syringe used for this purpose had, instead of the ordinary short, delicate needle, a large, stout one, two and a half inches long, which could be made to penetrate deep into the liver structure. The irritant used was tincture of cantharides, U. S. P.

The animals were kept alive from ten to twenty-five days. Immediately after the death of the dog the liver was removed and put in dilute, and after twenty-fours, into stronger alcohol.

The results of these experiments demonstrated: 1st. That the injuries of the liver heal in precisely the same manner as external wounds of the body heal. 2d. Hepatic abscesses are not produced from the gunshot wounds of the liver. 3d. Gunshot wounds of the liver do not produce any grave constitutional symptoms, and unless other vital parts are wounded, do not terminate fatally. 4th. The earliest time for healing of injuries of the capsule is five days, and of the true liver structure, fifteen days. 5th. The injection of simple irritating fluids into the substance of the liver produces similar results to those noted above."

As regards liver cells in hepatic abscess, he thinks they have been overlooked, on account of want of proper precautions in looking for them.

"I discovered that the liver cells were extremely pale, and so faintly visible that I was not surprised that I did not detect them at my previous examinations. With a high magnifying power I noticed semi-translucent bodies, frequently containing fat vesicles, and sometimes presenting a milky, faintly granular appearance. Occasionally a group of these translucent bodies were seen together. In no case could I discover these if I took a large drop of pus, so that everything was crowded by leucocytes and granular debris. In minute quantities, however, diluted with a drop of distilled water, the faint irregular bodies referred to became distinct enough to admit of observation. Upon careful study these bodies proved to be liver cells, which had lost their coloring matter from prolonged maceration in the serum. I have convinced myself of the above by scraping some pus from the wall of the abscess of the liver, obtained post-mortem, from this case, and here I could distinctly trace out the gradual transition between perfect liver cells and the faint, macerated-looking bodies which are found in the contents of the abscess, and which are direct derivations from the true liver cells. I regard the occurrence of fat drops in these bodies as a corroborative proof, as it is impossible for any other detached cell to contain fat drops of this character."

In conclusion, he says: "I am confident, from the examinations made by myself, and from the results of those reported by the above authorities, that a careful microscopical examination of the pus from true hepatic abscesses will, in every case, reveal liver cells, and with this fact proven we certainly have an invaluable diagnostic point in cases of hepatic abscesses."

Retained Placenta.

The following instructive case was presented by Dr. T. R. Trotter to the last meeting of the Mississippi State Medical Association:—

I was called to see Mrs. B., February 19th, and upon inquiry, obtained the following history: She was about six and a half months advanced in pregnancy, and had aborted about eight days prior to my visit. The midwife who attended her failed to remove the placenta, assuring the family that it would pass off without any trouble. I learned that she had complained of great distress in the back and hypogastric region, and had more or less fever; the family, however, were resting easy, under the delusion that everything would be right in a few days, and failed to appreciate, until the morning of my visit, the great danger to which she was exposed. Upon attempting to arise from her bed, she was taken with a terrible flooding: I was at once sent for, seven miles, and when I arrived found her very restless, pulse almost imperceptible, extremities cold, and the whole surface bathed in a cold, clammy perspiration, a continuous flow of blood from the vagina, eyes sunken, and the whole countenance denoting the greatest anxiety.

I gave her at once brandy, and had her rubbed with dry mustard, and gave her a large dose of ergot, and attempted to introduce my hand into the uterine cavity to remove the placenta; this I failed to do, on account of its contracted condition. I, however, succeeded in introducing the index finger, and proceeded, as cautiously as possible, to remove a portion of the placenta; the remainder I could not remove because the finger could not be passed around it. The flooding moderated at once, but she was pale as a corpse, and passed from one fainting spell into another for several hours; notwithstanding the frequent administration of brandy, chicken tea, etc. In eight or ten hours she was seized with a severe rigor, great thirst, restlessness, insomnia, and a small, rapid pulse, and complained of soreness and pain in the region of the womb and intense pain in the back, so much so that she could remain in one position but a few moments. I gave her enemas of laudanum for the restlessness and pain, and spirits of nitre and gelseminum for the febrile stage. As soon as the sweating stage set in, I gave quinine, iron and arom. sulph. acid; I continued this treatment about six days; after that I gave quinine, iron and nutritious diet. I used, from the beginning, flannels wrung out of hot water, vinegar and laudanum, alternated with hot turpentine stupes to her bowels, frequently injecting the vagina with a solution of chlorinated soda.

The discharges per vaginam were very offensive, her tongue was very dry and red, and great tympanites and dysuria; to relieve this condition, I gave her turpentine internally and used it externally over the bowels.

About the thirteenth day abscesses were observed about her ankles, which, after being opened, gave issue to very offensive purulent matter. About the sixteenth day she began to

show unmistakable signs of improvement, and in twenty days after my first visit, I considered her out of danger.

This was certainly a very unpromising case, the immense loss of blood, followed by the long continued putrid discharge, toxæmic fever, with its small, thready pulse, great prostration, tympanites, dysuria, and the putrid abscesses, presenting an array of complications sufficient to discourage the most sanguine.

I have reported this case to show what dire calamities ignorance or carelessness on the part of an accoucheur may bring upon an unsuspecting woman, and to impress upon the minds of the young members of the profession the great importance of seeing that every portion of the placenta is removed, and that the uterus is well contracted before leaving the patient.

I would not, however, advise any very prolonged or harsh measures to remove the placenta in cases of abortion prior to the fourth or fifth month, as by so doing the parts may be irritated and her suffering much increased. When the finger cannot be passed around the placenta, I always plug, if I am compelled to leave, and request the family to let me know should anything occur of an alarming character. In twelve to twenty-four hours I always return and remove the plug, and generally find the placenta and a few coagula of blood to come away with it.

The Speed of Thought.

The Boston *Journal of Chemistry* says:—

We have several times given the readers of the *Journal* a report of what has been done by scientists to determine the rate at which nervous influence is transmitted through the telegraphic system of our bodies. Some recent investigations on the subject are thus summed up in the *American Journal of Arts and Sciences*:—

Sensations are transmitted to the brain at a rapidity of about 180 ft. per second, or at one fifth the rate of sound; and this is nearly the same in all individuals.

The brain requires one-tenth of a second to transmit its orders to the nerves which preside over voluntary motion; but this amount varies much in different individuals, and in the same individual at different times, according to the disposition or condition at the time, and is more regular the more sustained the attention.

The time required to transmit an order to the muscles by the motor nerves is nearly the same as that required by the nerves of sensation to pass a sensation; moreover, it passes nearly one hundredth of a second before the muscles are put in motion.

The whole operation requires one and one-fourth to two-tenths of a second. Consequently, when we speak of an active, ardent mind, or of one that is slow, cold, or apathetic, it is not a mere figure of rhetoric, but an absolute and certain fact that such a distinction, with varying gradations, really exists.

The method by which these nerve motions are measured is thus described:—

If a cylinder divided into 360° be caused to rotate 1000 times in a second, it is evident that the passage of one of those degrees before a given point is equal to the 1,360,000th part of a second; this may be divided by a microscope, so that a period of time equaling the ten millionth, or even the one hundred millionth, part of a second may be measured. By this arrangement it is possible to measure the rate of nervous impulse. Suppose an electric shock be given to the arm; it produces a sensation and a contraction of the muscles; then, by noting the interval of time between the shock and the contraction, the time occupied by the action of the brain to produce the contraction, however quick, will be ascertained. By trying this experiment on various parts of the body, the amount of sensibility of the different leading muscles may be determined.

A Difficult Forceps Case.

Dr. John T. Dillon reports the following case in the *British Medical Journal*:—

On May 10th, 1882, at about 10.30 P.M., I was summoned to assist another physician in a midwifery case. The patient, a strong, muscular, well developed country woman, aged 33, was now ill forty-eight hours, in her sixth confinement. All her previous labors were of a most difficult nature, none of her children being born alive; delivery being effected in some cases by forceps and in others by the perforator. The os was fully dilated and the head presenting in the brim of the pelvis, in the first oblique diameter. The waters had been discharged more than twelve hours. There was slight narrowing of the antero posterior diameter. The pains had ceased for some hours, in spite of the use of ergot. There was no constitutional disturbance. Forceps were applied, and after an hour's work the head was delivered, the appearance of which indicated the death of the child. The body could not be extracted. We were about opening the thorax, and eviscerating, when we had recourse to the following novel procedure. We procured about two yards of the ordinary diaper, and this we twisted into a long, narrow fold; and having made a loop, we encircled the child's neck in it. One of us then proceeded to pull on the ends of the fold, while the other, with his hands on the child's head, assisted in the extraction. In a few seconds the body of a large, well nourished child was born. The placenta was pressed out; there was no hemorrhage, and the woman made a rapid recovery. The cord was of the ordinary length and was perfectly normal from the placenta to within five inches of its termination in the umbilicus; here it broke up into a large, spongy mass, closely resembling placental structure. This mass was about the size of a large orange, and from it proceeded, to the navel, something less than one inch of cord, of the ordinary size and appearance. The placenta was normal in every respect.

Abuse of Injections of Morphia.

The *Medical Times and Gazette* says:—

At the first Athens Medical Congress (*Gaz. Méd. d' Orient*, July), Dr. Zambaco terminated a paper upon this subject with these resolutions:—1. Although the subcutaneous injection of

morphia is so precious a means for the relief of pain of all descriptions, patients often contract a habit of using it which it is almost impossible to break through, continuing to employ it after the reason for its use has passed away, and progressively increasing the dose, and inducing a slow poisoning, which acts on nutrition and on the intellectual faculties. 2. Practitioners should prescribe these injections with much precaution, and should not allow the patients to practice them themselves, in order to prevent them contracting the fatal habit. 3. On account of the dangerous effects of their prolonged employment, they should not be used in chronic disease of the heart, in cerebral affections, or in any disease accompanied by debility in general, and especially that of the nervous system. In such cases we may obtain ease advantageously by the hypodermic use of sulphuric ether. 4. The general enthusiasm which at one time gained hold of the profession for these injections has, in face of the calamities that have resulted from their employment, diminished. 5. Although opium acts by its alkaloids, and especially morphia, yet it and its extracts are often preferable to morphia, and it has been an error to so generally displace it. After other speakers had expressed themselves in the same sense, Dr. Galvani said he considered that their observations savored somewhat of exaggeration, and that it would be doing a great injury to medical art to discredit the proper use of these injections, which, like any other remedy, may be abused. Morphinism is especially observed in the great centres of civilization, wherein many have their nervous systems in a condition predisposed for its production. Morphia always requires to be administered with caution, and in relation to the idiosyncrasies of the recipients.

On a Peculiar Reducing Substance in the Urine, from the Internal Employment of Turpentine.

The *Med. Times and Gaz.* says: From the researches of M. Vetlesen, in the Physiological Institute of Christiana, published in the *Nordiskt Medicinskt Arkiv*, for 1882, it appears that during the internal employment of turpentine, the urine contains a rather large quantity of a reducing substance, which, in its reactions (such as blackening, on boiling, an alkaline solution of oxide of bismuth, and reducing the peroxide of copper to the suboxide), seems to be composed in great part of a matter strongly resembling grape-sugar, without, however, being in any way identical with it. The author, in fact, has never succeeded with the polarizing apparatus in observing the rotation to the right side. The reaction disappears after fermentation, which process appears to act more slowly. Experiments subsequently showed that a small quantity of hydrochloric acid destroyed this reducing substance, even at a relatively low temperature, while under the same circumstances it was proved that grape-sugar is only slightly destroyed. The reducing substance described by M. Vetlesen is, in all probability, optically indifferent; it disappears by fermentation with rather more difficulty than grape-sugar; but as it does so when the urine is simply left to rest for about five days, it might perhaps be supposed that it is not a fermentable body. But M. Otto has traced in one experiment, and after fermentation, some alcohol in the distilled product, while before fermentation the urine gave only a negative result. It may be admitted, as the result of the experiment, that the substance appearing in the urine during the internal use of turpentine is a kind of fermentable sugar, the nature of which, however, is not yet specially determined. The researches made appear to show that the quantity of this reducing substance is in relation to the amount of the dose of turpentine, and that it diminishes if the use of this drug be continued for a certain time.

Excision of Superior Maxillary and Inferior Dental Nerves, for Neuralgia.

In the Pittsburgh *Medical Journal*, Dr. Wm. Wallace says: "The fact that a new connecting medium sufficient to enable a nerve to perform its functions can be developed to the extent of an inch or more has been sufficiently attested. Any resection, therefore, which would embrace a less portion of nerve would in all probability be of only temporary benefit, unless the period of relief gained thereby would permit of such constitutional recuperation as would withstand any future attacks.

"My experience in the operation of resection for neuralgia has been extremely limited, but the success attending my efforts has been so satisfactory that I venture to offer it as an inducement for a more extended application of this method of relief."

A severe case of neuralgia coming under his care, it was decided to resect a portion of the inferior dental nerve. The disc of bone removed by the trephine failed to expose the nerve, and the patient bearing ether badly, it was decided to postpone further operative interference. Subsequently, both the superior maxillary and inferior dental nerves were excised.

The continuance of the pain for a few days after the operations and its return for a short time, seven months later, cannot well be accounted for. The clinical features of the case embraced all of the symptoms described by Trousseau as characteristic of epileptiform neuralgia, which he believed to be an expression of true epilepsy, a view scarcely confirmed by the history narrated. Entire and permanent immunity from pain, return of appetite, ability to take solid food and comfortable sleep, were secured by the operations.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The "Transactions" of the Mississippi State Medical Association for its last meeting are very interesting. There are many short articles of much practical value, and the whole is well worth reading.

——An interesting history of the psycho-physical training of an idiotic child is narrated by Dr C. H. S. Davis, of Meriden, Conn., in a reprint from the New England *Medical Monthly*.

——We have received the "Transactions of the State Medical Society, of Arkansas," at its Seventh Annual Session. It contains many good articles, and evidences zealous interest on the part of the profession of the State.

——"The Sixth Annual Report of the State Board of Health, of Wisconsin" (1881), contains a deal of valuable reading. The various articles on hygiene show the increasing interest that is being taken in this science in our country, and many of the articles are of immense practical value.

——Messrs. Lindsay & Blakiston's "Physicians' Visiting List" for 1883 has appeared, in its customary make-up, to which are added the metric system, posological and toxical tables. As this list has been familiar to physicians for thirty years, and always popular, we need not reiterate our often expressed opinion of its merits.

——A valuable point in practice is set forth by Dr. Charles Turnbull, in a reprint from the *Transactions* of the Penna. State Medical Society, entitled "Powdered Boracic Acid in the Treatment of Chronic Purulent Inflammation of the Middle Ear." Copies of it may be had from the author, 1702 Chestnut St., Philadelphia, and it will repay every practitioner to peruse it.

——The importance of "Subjective Traumatism of the Eye" is presented by Dr. W. S. Little, of this city, in a recent reprint. By "Subjective Traumatism," he means the diminution of sight, and diseased condition of the tissues of the organ, resulting from optical defects or ametropia. A number of cases are detailed, with useful suggestions for treatment.

——In a reprint from the Gynecological Society *Transactions*, Dr. W. R. Gillette urges the value of digital assistance during the first stage of labor. He believes that he can, by so doing, dispense with ergot altogether and reduce the use of the forceps very materially. The procedure is very simple. An anæsthetic is administered to the obstetrical degree, that is, just to the extent of dulling the pains; then, *during uterine contraction*, he introduces two fingers into the os and expands them; or by hooking the forefinger on to the cervix, makes firm pressure, occasionally sweeping the finger around the whole cervical orbit. This is done *during the pain and without any violence.*

BOOK NOTICES.

Medical Electricity. A Practical Treatise on the Application of Electricity to Medicine and Surgery. By Roberts Bartholow, A.M., M.D., etc. Second edition, enlarged, with 109 illustrations. Philadelphia: H. C. Lea's Son & Co. 1882. Cloth, pp. 286.

It is safe to say that in the minds of most physicians there is a certain degree of haziness about the use of electricity in medicine. They probably own a battery, and if they have had it two years, it is probably out of order; they can recall some cases where this mysterious agent seemed to work wonders, and a good many more where it utterly failed. Why it did either, they don't know.

Yet there is no doubt but that its therapeutic use is increasing. This work of Dr. Bartholow's will, therefore, be welcome to many. It is fortunately not such an interminable treatise as most electro-therapeutists like to write. It is not burdened with a needlessly learned terminology, and is written more from the point of view of the physician than the specialist. The second edition has been considerably increased over the first, and has been brought up to the most recent advances of the science. It can in every way be recommended to those who wish to read a lucid, manageable monograph on this form of therapeutics.

On Slight Ailments; their Nature and Treatment. By Lionel S. Beale, M.B., F.R.S. Second edition, enlarged and illustrated. Philadelphia: P. Blakiston, Son & Co., 1882. Cloth, 8vo, pp. 283. Price $1.25.

Obsta principiis is a very wise old maxim in medicine, and Dr. Beale has done an acceptable service in calling the attention of the profession to the often underrated importance of the slighter forms of disease. Let these be neglected, and they often lead to the most serious results; let them be promptly and intelligently attended to, and many a person of feeble constitution will survive to old age in comparative comfort. Dr. Beale discusses such topics as nausea, indigestion, constipation, diarrhœa, worms, vertigo, biliousness, neuralgia, and the common forms of slight inflammation. His suggestions are eminently judicious, and though what he says may be familiar to all members of the profession, their application of the knowledge cannot but be improved by a perusal of his words.

THE

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THE PROBLEM OF MEDICAL EDUCATION.

A recent issue of the *Lancet*, commenting on the questions involved in medical reform, says: "In plain terms, the history of medical reform in the last fourteen years has been a history of failure; a history of nineteen bodies out of sympathy with the profession, several of which are superfluous, striving to perpetuate themselves and all their individual privileges, without reference to public advantage and the question of justice to those on whom exacting examinations and fees are required."

Thus has the cry ever arisen, of imperfections in medical education, and thus, we are inclined to think, will we continue to hear such wailings, to the end of time. No profession, no human institution, nothing in this sphere is perfect, and without absolute perfection there will ever be room for fault-finding.

The more intelligent public, as well as the better class of physicians, have always been ready to recognize the shortcomings in medical education, and to leave no effort untried to remedy them.

But there is one point little touched upon, and against which legislation can have no influence, namely, the post-graduate education of the physician.

We have in our own country several institutions of medical instruction in which the course of medical training is very satisfactory; not, indeed, all that idealism would require, but still very excellent, and good enough, were it supplemented by the practices of which we are about to speak.

It would be unreasonable to consider a young man just out of a medical college, or but just licensed by an examining board, as a *physician*, in the comprehensive sense of the word.

True, he has received the legal right to practice the healing art, and his possession of a certificate from a recognized institution or a legally constituted body is proof presumptive of his theoretical mastery of the science. But does this make him a physician? Not at all.

He may, and indeed must (if he emerges from one of the institutions we have referred to), have had some practical acquaintance with the clinical aspects of his profession; but this has been so comparatively limited, his time has been so much occupied in laying the solid foundation, that it does not count for much.

In truth, when a young man graduates in medicine he is just ready to commence the serious study of the science; all his college labor has been but a preparation for the real intellectual work that succeeds it.

This labor cannot be controlled by legislation, but is always under the direct influence of inclination or circumstances.

In our country the young men who choose medicine for a profession are, as a rule, strange as it may seem, very deficient in worldly wealth, hence they are compelled to turn their diplomas into practical value as soon as possible.

Among the more favored class, who possess an abundance of pecuniary comfort, disinclination for study is an American characteristic, but it is from among the few sensible and appreciative

ones of this latter class that the leaders of our profession are formed.

A significant fact in this connection is, that in England as well as in our own country, the most learned and scientific physicians have not always been the *best* college students (indeed, in many instances, the case has been just the reverse), thus conclusively demonstrating that the preliminary education is not the all important element of subsequent proficiency.

It is too utopian to hope for perfection in any course of teaching where there is inter-dependence of teacher and taught, and it is practically impossible to *entirely* do away with this condition, since the dependence of one on another, in all walks of life, is the necessary foundation of social existence.

The State may subsidize, but influences and personal considerations will be potent all the same. To a certain extent, selfish motives may be debarred from the regulations for preliminary medical as well as any other education, but its entire eradication, we fear, is an impossibility.

We have certain standard text-books on all the varied branches pertaining to our comprehensive science.

All of our best institutions furnish facilities for bedside instruction and for practical laboratory work.

When a thorough study of the first, and a faithful attendance upon the second is enforced and supplemented by a rigid examination, all that can be done has been done.

Still the successful student is not yet a physician.

Moral suasion is now the all powerful lever that must be called into action to carry on that which has but just been commenced.

The teacher must constantly impress upon his students the all important fact that constant and unremitting study is absolutely necessary if they desire to be physicians in fact and not merely in name. Each member of our profession must ever remember that our science is not like arithmetic, in which certain rules, once committed to memory, will forever remain and serve every purpose.

They must realize that our profession is a progressive and changing one, that not a single day passes in which some new contribution is not made to our voluminous knowledge, and so realizing, they must feel the necessity for constant study.

Again, after we leave the few fundamental principles taught by anatomy, physiology, and pathology, we must remember that ours is not a science of absolute facts, but rather one of broad generalities, and that, therefore, the physician must, preëminently, be a man who cultivates the two faculties of observation and reasoning to their fullest possible extent.

Can any legislation force a man to so regard his post-graduate life? We fear not.

It would therefore seem that the true solution of the problem of "Higher Medical Education" is to be found, *not so much* in legal enactments or other provisions for elevating the requirements of medical schools or licensing boards (though these are all admirable, as far as they go, and form an important part of the whole), as in advice, constant, never ceasing advice, to students and graduates, to persistently and intelligently study throughout life. To build upon the ante-graduate foundation a post-graduate superstructure of broad observation and reasoning, of reading and reflection, that alone can form a temple grand enough to become the abiding place of a *true* physician.

How to erect this structure of post-graduate life should form a more important part, than it now does, of the teachings of our medical instructors.

The post-graduate courses of our best institutions afford certain facilities to those desirous of pursuing their preliminary studies, but these only go to a certain extent, and have an ending, while the student life of a true physician should terminate only with his death; and such a life must be a voluntary one; no force can compel it; advice only can demonstrate its value, and thus secure it accomplishment.

The Louisville *Medical News*, speaking of the late Dr. George B. Winston, of St. Louis, tells us that a friend once remarked to

him, "Doctor, what necessity is there for this ceaseless labor and study at your time of life?" With a look of astonishment never to be forgotten, he replied, "My dear sir, I am under bonds to do it. When I offered my professional services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which human flesh is heir; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God will hold me responsible for the loss, through inexcusable ignorance, of a precious human life, and punish me accordingly; and whenever I get my consent to be content with present professional attainments, and trust my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations which, with my best endeavors to meet them honestly and conscientiously, still sometimes is almost heavier than I can bear."

Dr. Winston's life and example will do more, if conscientiously followed, to solve for us the vexed problem of "Higher Medical Education," than many treatises and much legislation can possibly hope to accomplish.

PROFESSIONAL ETIQUTTE.

We fear this is one of the lost arts among many of our profession. What it means, what are its mandates, what it obliges us to do, no one can plead ignorance of, simply because every decent and respectable man has within his innermost self that little monitor constantly advising him to do unto others as he would that they should do unto him. This, after all, is the foundation of etiquette and of justice in every profession and in every walk of life. There are some men whose moral sense seems so little developed that they fail to realize when they transgress this golden rule, and for such, one can but have pity, and charitably say, forgive them, for they know not what they do. But the majority of our profession have sufficient intelligence, education and innate refinement to cause them to thoroughly appreciate their own littleness and meanness when they degrade themselves to try and secure their own preferment by belittling those whom they feel are too noble and too much above their dirty level to meet them with their own soiled weapons. Feeling this, many conscienceless men are ever ready to aggressively and remorselessly assail others, and to, so to speak, stab them in the dark, trusting that they will never recognize their supposed disguised and ought to be despised assailants.

There is another class of professional parasites, who, while they do not desire to injure their brethren, yet are so constituted, and possess such a small mental calibre, that they cannot resist the temptation to, vulture-like, pounce down upon any imagined weakness or failing in their confrères, and by distorting and magnifying it into gigantic proportions, hope to raise themselves by the supposed thrust downward they have given to some worthy and innocent man. There are so many open questions in medicine, and so many important questions upon which men of equally great eminence entertain directly divergent views, that it is not difficult for one so disposed to criticise almost any statement that may be made or any action that may be performed, and to cite good authority to support his criticism, lacking, the while, the candor or honesty to admit that he whom he criticises can produce equally strong authority for his statements. Such miserably mean men always come to grief in the long run, for be it said, to the credit of human nature, man, on the whole, realizes that honesty is the best policy; and though water for a time may be forced up grade, yet when left to itself it must, according to nature's inevitable laws, seek its level; so these men are ultimately detected in their nefarious attempts at self advancement, and are forced, by public and private opinion, to occupy that low level to which all kinds of dregs, animal and vegetable, naturally belong.

So, then, it is pleasing to the honesty of every right-minded man when such despicable men, (for we can call them by no more gentle name)

are exposed. Such has been recently done in England, in the case of two professional back-biters. In the one case a surgeon was engaged to attend a case of compound fracture. When the man was discharged, cured, the physician presented a bill for sixty dollars. Instead of paying it, the patient, *acting under the advice of another physician*, instituted a suit for damages, on the ground of malpractice, basing his claim on "forgetfulness or ignorance of all the rules of art, and in particular on the employment of perchloride of iron to arrest hemorrhage." A committee of experts, composed of medical men, appointed by the court, concluded in favor of the surgeon; the man offered to pay the bill and withdraw his suit; to this the surgeon objected, when it was ruled by the court that the man should pay the original bill, all costs and one hundred dollars damages to the surgeon. In the second case both plaintiff and defendant were medical men. An illiterate man was sent to a certain city, with a card from a doctor in a neighboring town, recommending him to the care of Dr. A. An omnibus driver, by mistake, took him to the house of Dr. B, who kept both card and patient. Dr. A heard of the occurrence, and meeting Dr. B on the street, upbraided him with his unprofessional conduct, and called him offensive names. B, seeing that his position was compromised, summoned A before the courts, where the tables were entirely turned; B, was condemned to pay A $1000, damages, and an appeal resulted in a confirmation of the judgment.

Such cases should delight every honest man and every reputable practitioner should constitute himself a detective to bring to the bar of justice and purge from the list and companionship of respectable physicians, all who endeavor to advance themselves by libeling honest and capable members of our profession.

It is hard enough for a man to succeed in this world of struggling, even though he receives fair treatment from all, but when the miserable back biter comes in to injure him his lot is truly deplorable. So then let us have done with unseemly contention in our great profession.

SPURIOUS MEDICAL JOURNALS.

It is common to deplore the fact of the increase of medical colleges and journals in this country. As for the colleges, we expressed ourselves about them recently, and share in the general regret at the formation of so many hurtful institutions.

With journals it is in a measure the same. Pliny is recorded as having said that no book was so utterly weak that he could not learn something useful from it. It would puzzle him, now-a-days, to get anything worth knowing from a good many works which see the light. But it may fairly be said that in scientific literature his remark holds good. Only there the difficulty comes in—and it is a very grave one—to distinguish between what is said for the good of science, and what for the good of self under the mask of science.

There are two classes of medical journals which ought to be weeded out. They are Canada thistles on the soil of professional culture; noxious plants, actively injurious, both by occupying the place of something better, and disseminating poison instead of food.

One of these is the class which sells itself, which levies blackmail, which publishes articles professedly scientific, but secretly intended to cry up or cry down this remedy or that man, this mode of cure or that institution. Does any one say that this species of vermin does not exist among us? To such flattering optimist we answer that within this year we have had submitted to us indisputable legal evidence, where a physician of some general repute and a medical journal that claims a high position had deliberately sold out their pen and pages for a sum of money. They had actually made overtures to both sides and took the highest bidder! This we know, and there are other instances which, as the boys say, we should like to bet on.

All will agree that this species of journals is as noxious a breed as tree worms in autumn, and deserves to be stamped out with as little remorse. About the next class we may not obtain so unanimous a verdict.

These are the journals published as advertising

mediums by drug manufacturers. By the very nature of these periodicals, they cannot be honest. They might be, indeed, if they pretended to be nothing more than what they are, to wit, a tradesman's announcement. But with this they are not content. They assume a learned title, and pretend to be scientific sheets. Of course, they contain a good deal in favor of the drugs they are intended to advertise, and nothing against them. Reports of successful cases attributable to these remedies are eagerly printed, but reports of another color are not wanted. Various arts are used to blind the reader as to their real purpose, and the journal is offered at a very low price, or often given away.

We do not have to go outside of Philadelphia for examples of these spurious, pseudo-scientific sheets. As they are essentially, and by the condition of their existence, one-sided and deceptive, we believe them to be an actual injury to the professional reader. We would warn him that when he sees a lot of letters and statements advocating a drug or preparation, he may be sure that he has in his hands a journal which is merely a trader's advertisement, no matter how it is named. If he doubts it, let him write an adverse criticism on the drug in question, and see if his lines are admitted.

To our mind it would be better if the profession itself drew an authoritative distinction between medical journals which are such, and those which only pretend to the name.

Notes and Comments.

Destruction of Trichinæ.

The *Med. Times and Gaz.* says that M. Fourment's experiments conclusively prove that salting of meats cannot be regarded as a safeguard against trichinosis. He succeeded in producing trichinæ in mice fed upon salted meat that had been again imbedded in fine salt and hermetically sealed for fifteen months. Trichinæ may die in salted meats as well as anywhere else, hence some experimenters have claimed a destructive action for the salt. But the parasites may also live a considerable time without our being able to determine the length of the period after which death necessarily follows latent life. It is also pointed out that when the trichinæ penetrate the muscles, they are perfectly free, and have no covering whatever to protect them, and a month or more elapses before they accept the situation, and coil themselves up to quietly await their chance of being eaten up by some other animal, which must occur before they can possibly develop into the perfect adult condition. But it is only at the end of three months that a fibrous cyst begins to form around them, and it is perhaps a year before the covering is sufficiently dense and impermeable to entirely protect it from the action of salt. The principal safeguard against trichinosis must still be looked for in perfect cooking. In no single case, and numerous experiments have been made, has heat failed to entirely destroy these parasites; and only those who neglect the precaution of thorough cooking (absolutely necessary in the case of all pig-meat and sausages), need be under any fear of their introduction into the system.

Psychosis and Uræmia.

That sometimes severe *psychic* disturbances take place during or following a *uræmic* attack has more than once been alluded to. We are told of a very interesting case, in the *Deutsche Medizinal-Zeitung* of August 3d, 1882, which happened in the large Charité Hospital of Berlin. The case is described in full by Dr. L. Brieger, in the annals of that hospital for 1882.

A man 54 years old, who had for a long time suffered from a kidney disease, was suddenly seized with a number of uræmic attacks. One of them was especially severe and was followed by coma and stertor, lasting twenty-four hours. The urine, which during this state was withdrawn by the catheter, had a dark-red color and was almost stiff, from the presence of a large amount of albumen. Hitherto the urine had shown at times only, and then sparingly, albumen. When the patient at last awoke from his coma he appeared confused. Very soon a state of intense excitement set in, followed by wild hallucinations, which continued uninterruptedly for eighteen hours. Consciousness then gradually returned and reason resumed its sway, but the memory during the time of the attack, and for everything that happened in it, was totally extinguished. During the next four days a plain and well-expressed aphasia could be noted. The presence of the albumen continued in the high degree for a short time still, then it gradually returned to its former moderate percentage.

The patient had a few more light spasmodic attacks, and then became convalescent in so far, as without further symptoms only a mild albuminuria affected him, so that he could be discharged from the hospital.

Subinvolution of the Uterus.

Dr. John Williams delivered an address on this subject before the Section of Obstetric Medicine, at the recent meeting of the British Medical Association (*British Medical Journal*), in which he said that the causes of subinvolution are, general debility; multiparity at an advanced age; post-partum hemorrhage; retention of portions of placenta and membranes; lacerations of the perineum; and pelvic inflammations. Its results are hemorrhage, dysmenorrhœa and prolapsus. Some of these causes, as post-partum hemorrhage, perineal laceration, pelvic inflammation, retention of portions of placenta and membranes, can in a great degree be prevented. Wounds of the perineum should be immediately and completely closed. It is very important to remove the discharges from uterus and vagina, to be effected by abundant hot vaginal injections (three or four pints; temperature 110°–115°) commenced immediately after delivery and repeated twice a day at least. They should contain a disinfectant.

The Action of Hyoscin on the Insane.

In the *Charité Annalen*, of Berlin, 1882, we find the result of very numerous observations which were made by Dr. R. Gnauck, in regard to the effect of *hyoscin* on the insane, of which we made mention in a late number of this journal. G. made use, in these experiments, of the hydro-iodide of hyoscin. He employed it subcutaneously, in the doses of 0.0005 (about $\frac{1}{120}$ grain)–0.0015, or internally in a dose $\frac{2}{3}$ to 1 time as large. The highest subcutaneous dose he ever administered was 0.002, about $\frac{1}{30}$ grain, by which we can see how powerful the remedy is. The results were as follows. Hyoscin has no specific effect whatever on any form of disease of the insane. It causes sleep and removes restlessness, but by no means better than the other known remedies. Toxic side effects (general malaise, headache, vertigo, debility, feeling of being paralyzed, nausea, loss of appetite, etc)., indicate special caution, as the individual sensitiveness to the influence of hyoscin is a very varying one. Generally it is not well received; especially, however, harmful in dementia paralytica and in delirium tremens. An anodyne effect G. had never occasion to note. It can, therefore, perhaps, only be indicated when the other hypnotics seem to have no effect; but in general it cannot be recommended. We draw the attention of our readers who may feel inclined to experiment with this powerful remedy, once more to the fact that it is, perhaps, the most dangerous of all our drugs which have ever been used internally, as the one-hundredth grain of hyoscin has been known to almost cause death. Morphia and stimulation would be the proper antidotes.

Coffee and its Effects.

Dr. P. A. Wilhite read a paper with this title before the last meeting of the South Carolina Medical Association (*Transactions*) in which, after reciting the usual poisonous properties of coffee, he claims that it is more injurious than is generally supposed by the laity or admitted by the profession. He believes that strong coffee, when used to excess, will at least promote, if not cause gout; and its continued use seriously impair the blood, irritate the kidneys, congest the liver, derange the nervous system, and paralyze the digestive functions in all their actions, causing acidity, heartburn, tremor, debility, irritability, dejection of spirits, etc. His attention was directed in an especial manner to these poisonous properties during the late war, when women for whom he had frequently prescribed for a complication of nervous troubles, being unable to procure coffee, became comparatively strong and healthy before the close of the war. He considers that is not so much the quantity taken, as the peculiar susceptibility of some persons to its influence.

A Proposed Substitute for Carbolic Spray.

Dr. A. W. Mayo Robson read a paper on this subject in the Section of Surgery, at the recent meeting of the British Medical Association (*British Medical Journal*). He pointed out the dangers and bad results of the irritating effects of the carbolic spray, and then described his substitute, which he has used in many cases with excellent results. Air is first passed through a cylinder containing cotton-wool, which Pasteur has proved to be sufficient to free it from germs; but as this would only be a pure and not an antiseptic air, it is then passed through two cylinders containing pumice-stone, over which about an ounce of eucalyptol has been ponred. Thus it emerges as a pure air,

loaded with invisible particles of an antiseptic, which seems to be capable of destroying any vestiges of germ-life which may have been drawn in from the surrounding atmosphere; it is directed over the desired spot by means of five coralline nozzles, which act on a ball and socket-joint, capable of being fixed in a certain direction by a screw. If in an institution, such as a large hospital, the hydraulic bellows used to work the organ, or the water power used for the lift, can be made available, it would be an easy matter to have a pipe to each ward and to the operating room, which would convey the desired current, ready to be attached to the machine whenever it might be wanted.

Caput Obstipum.

The *Obstetric Gazette* says that Prof. Albert, of Vienna, recently exhibited a child with this affection. The head is inclined to the left; that is, the lateral plane is abnormally near the left shoulder. This condition is usually congenital, and is due generally to peculiarities of the position of the fœtus in utero, allowing contraction of the sterno-cleido-mastoid muscle. In breech presentations and difficult forceps delivery, a laceration of this muscle may occur, with consecutive inflammation and contraction. A mere restitution of the head is of no use; the shortening of the muscles must be counteracted by subcutaneous division, followed by orthopedic treatment.

During the first four or five days the patient must lie upon a hard bed, with the head in a horizontal position. When the soreness has passed away put on the Dieffenbach cravat, which is so firm and high on the affected side as to prevent a return to the faulty position. Acquired caput obstipum may be spastic or paralytic, or the result of cicatricial tissue building, or originate in changes in the spinal column.

Milk Powder in Gastric Affections.

The *Medical Times and Gazette* says that Dr. Debove, in a communication to the Paris Hospital Medical Society (*Gaz. Hebdomadaire*, August 25), observes that the milk regimen, which is so indispensable in affections of the stomach, and especially simple ulcer, speedily becomes so disgusting to these patients that it has to be left off. This serious inconvenience, however, may be remedied by the employment of the œsophageal tube now used for feeding phthisical patients. But by this only a litre of milk can be introduced at a time, so that it would require to be employed six times in order to introduce the six litres, which is the mean quantity required for the subjects of *ulcus rotundum*. To avoid this frequent introduction of the tube, Dr. Debove has had skimmed milk evaporated (cream being but slightly digestible), and the residue reduced to a fine powder. If this be dissolved in warm hot water, two or three litres of milk may be injected in the same volume as a single litre. It is possible that this milk-powder, which furnishes excellent results in gastric affections, may also prove very useful in Bright's disease, cardiac affections, and all cases in which a milk regimen is employed. About a litre of pure milk is represented by 4 ounces of the powder. Dr. Dujardin-Beaumetz observed that in feeding the subjects of phthisis with the tube he has obtained excellent results from a mixture of powder of meat, powder of blood, and powder of milk. As powder of blood is not very digestible, he only adds a small proportion of that as a ferruginous principle.

Sudamina in Typhoid.

M. Albert Robin has found, according to the *Lancet*, that the liquid of typhoid sudamina contains a number of fine globules of fat and some epidermic cells. It contained neither albumen nor sugar, and was not rendered opaque by the addition of alcohol. No uric acid could be discovered in it by the murexide test. An analysis showed that it contained a considerable quantity of chlorides, but no trace of sulphates or phosphates; the proportion of water was 982, of solid matter 18, per 1000; the solids consisting of 14 parts of organic and 4 of inorganic substances. Hence the amount of organic material eliminated by the perspiration in typhoid must be regarded as considerable.

Hyaline Degeneration.

The *Lancet* says that, in *Virchow's Archiv.*, Dr. Max Vallatt describes the process of hyaline or fibrinous degeneration of tubercular formations. In tubercles it is best observed in those which occur in the spleen, lymphatic glands and liver, and is to be regarded as an early stage of caseous degeneration. He concludes that it is formed from the reticulum of the peripheral zone of the tubercles, and also from the trabecular tissue of the spleen and lymphatic glands, the bands becoming thickened, homogeneous and glistening, while the spaces between the original

fibres become converted into narrow channels, in which only the nuclei of the cells that formerly existed there remain. In the tubercle it also replaces the epithelioid and giant cells, the former appearing to be converted into homogeneous non-nucleated masses. The precise share taken by the giant cells in the formation is unknown. The channels left between the degenerated and swollen bands allow of the passage of fluid and pigment particles into the interior of the tubercle. In caseating the material breaks up into a finely granular mass, and is often found to be beset with nuclei, either the relics of previously existing cells or immigrants from surrounding vessels.

Dreams.

The *British Med. Jour.* records some interesting experiments on this subject that have been made by M. G. Delaunay. According to psychologists, dreams are generally illogical and absurd. M. Delaunay, however, by covering his forehead with a layer of cotton wool, rendered at will his dreams healthy and intelligent. According to his experience, the dreams which people have when lying on their back are sensuous, agitated and erotic. Those which occur when the dreamer is lying on the right side are changeable, full of exaggeration, absurd, and relate to old recollections. Those which occur when lying on the left side are intelligent, reasonable and relate to recent occurrences. People often talk during the last mentioned dreams. The author considers that dreams, intelligent or otherwise, erotic or sober, can be induced by causing variations in the cerebral circulation and the nutrition of the various regions of the brain, either by the elevation of the cranial temperature or by decubitus. They, therefore, form an interesting field for psychological research.

Tuberculosis of the Tongue.

The *Lancet* says that Dr. Thomayer, of Prague, describes three cases. In one case a wide fissure existed, about the middle of the dorsum, with yellow-coated base, and prominent, coarse tubercular nodules at its margins. In the second, the ulcer occupied the right half of the tip of the tongue, and in the third it was situated on the frænum. Two of these cases died, and microscopical examination was made. The ulceration had destroyed the mucous membrane and sub-mucous tissue, and the base was formed by a thick layer of small, round cells, intersected here and there by muscular bundles. Beneath this there spread into the inter-muscular spaces masses of similar cells, which were found to consist partly of giant cells and to be separated by the delicate stroma of tubercle. The muscular fibres themselves seemed invaded by the cell growth. The extent of the lesion demonstrates the futility of caustics, and points to excision as the proper treatment.

Treatment of Eclampsia.

Dr. C. Breuss (*Arch. f. Gyn.* xix, p. 218), recommends, for the cure of eclampsia, a strong diaphoresis, produced by hot baths followed by wrapping up in flannels. He has made use of the same, not only during the delivery, but also during the last months of pregnancy, and with success. Pregnancy was in no case interrupted by it, but œdema and albumen in the urine disappeared totally. The baths were kept at a temperature of 40–45° C. The duration of the bath was half an hour; the patients were kept wrapped up in blankets after the baths for two to three hours. The same cure was also employed in hydropic pregnant women affected with albuminuria; and here also the result was such a favorable one, without ever interrupting the normal progress of pregnancy, that we may well recommend future trials of the same.

Aconite.

The *British Medical Journal* says that Mr. E. M. Holmes has drawn the attention of the Pharmaceutical Conference (*Pharm. Jour. and Trans.*,) to the want of uniformity in the root sold as aconite. Many species, or varieties, of the root are current in commerce. Since aconite is now being largely used, internally, in the treatment of inflammatory affections of the lungs, fevers, and other acute cases, it has become extremely important that so powerful an agent should receive far more attention at the hands of the pharmacist than it has hitherto received. We are glad to see that attention has been drawn, by so excellent an authority, to this subject.

Mental Activity and Tissue Metamorphosis.

The London *Medical Record*, quoting from *Archiv. für Pathol. und Pharm.*, says that. after numerous experiments on himself and others, Spick concludes that mental work does not to any perceptible degree affect the metamorphosis of the tissues of the body. The total

quantity of the urine is not altered, nor are the urea, uric acids, chlorides, or sulphates increased or diminished. Contrary to expectation, there is not the slightest increase in the excreted phosphates. The proportion also of oxygen, nitrogen, and carbonic acid in the respired air, is much the same as when the brain is not actively engaged. The molecular changes which occur in the brain during its activity are, therefore, either not oxidation-processes, or, if so, are so little in amount as to escape detection by the methods of investigation employed.

Placenta Prævia.

Dr. John Reid reports a case of placenta prævia, in the *British Medical Journal*, which terminated rather differently from what is generally supposed to be the rule. Having intentionally lacerated the placenta to some extent, with the result of but covering his fingers with blood, he ruptured the membranes, when only some blood-streaked liquor amnii escaped. Within three hours the labor terminated naturally. The placenta was soon expelled, but the uterus still felt like a large, doughy mass; but soon after the expulsion of about a pint of blood, firm contraction of the uterus resulted, and the case progressed favorably. This is one of the many cases which militate against Simpson's theory of hemorrhage in placenta prævia, and may also add some additional force to the objections against meddlesome midwifery.

Salicylic Acid in Typhoid Fever.

M. Vulpian, according to the *British Medical Journal*, has had great success with the internal use of salicylic acid in typhoid fever. He gives as much as a drachm and a half a day, in doses of four to five grains every half hour. He does not claim that it shortens the duration or lessens the mortality of the disease, but that it reduces the temperature. Of all patients treated, those who were given the acid improved most rapidly. By interrupting the treatment, M. Vulpian ascertained that the salicylic acid was really the cause of the lowering of temperature.

Bismuth in Dyspepsia of Children.

In *The Practitioner*, Dr. E. W. Dunbar, of Zurich, says that, for loss of appetite, in children, with pain after eating, nausea and depression, if accompanied by a tongue either clean or slightly coated, but showing redness and enlargement of the papillæ fungiformes, bismuth is very good. He gives it either in the form of subnitrate, in doses of one-half grain up to two, three and five grains, or the solution of the oxide in ammonia and citric acid, in doses of from two minims under one year to three, five, ten, fifteen and twenty minims, up to twelve years of age; the dose to be repeated twice, or four times a day, according to the severity of the symptoms. Bismuth is quite ineffectual in the dyspepsia of children, when the tongue is smooth, clean, and shows no enlargement or redness of the papillæ fungiformes.

Ferruginous Livers.

The interesting occurrence of an excessive quantity of iron in the livers of anæmic patients has been noted in Germany. Stahel and Lindenlang each describe a case. The *Lancet* says that Marchand has lately described the liver of a phthisical patient, aged sixty years, which presented an unusual brownish-red color, associated with evident cirrhosis. The microscope showed an infiltration of the hepatic cells and of the interstitial connective tissue by pigmentary corpuscles, which gave the characteristic test for iron with yellow ferrocyanide. A chemical analysis showed that the ashes contained not less than 30 per cent. of iron. It has been supposed that the excess of iron is the result of an abnormal destruction of red blood-corpuscles in the organ, but it is open to question whether it is more than the result of the free administration of iron by the mouth.

Treatment for Gout.

Dr. N. S. Davis, of Chicago, recommends forty drops of an equal mixture of the acetated tincture of opium and wine of colchicum seeds, to control acute paroxysms of gout. This dose may be repeated in an hour, if necessary. Oftentimes one or two doses will abort what threatens to be a very severe attack. When the paroxysm is under control the same remedies may be continued in smaller doses, three or four times daily, if any gout remains. We have used this remedy, and can add our endorsement to this distinguished recommendation.

To Prevent Necessity for Inducing Abortion.

The *Obstetric Gazette*, quoting from *Deutsche Med. Zeit.*, says that Depaul recommends in all such cases of contracted pelvis which indicate the necessity for inducing premature labor, that an attempt be made to lessen the size of the

child, by administering iodide of potassium to the woman.

He claims that this treatment was successful in a case of his, in which the conjugate of the true pelvis was from 7½ to 7¾ ctm. The previous three labors, in which she had no treatment, were very tedious and exhausting, while in this one labor came on at term, spontaneous and easy, the child living.

Correspondence.

Solution Ferrous Malate.

Ed. Med. and Surg. Reporter:—

Much attention has been given, of late, in many medical journals, to the use of the different preparations of iron. In your last week's issue I noticed the advertisement of the Solution Ferrous Malate. Having used this valuable chalybeate quite extensively in my practice, I have felt a desire to add my mite of testimony in the use of this remedy, for what it is worth. I commenced the use of Solution Ferrous Malate (as manufactured by the American Pharmaceutical Manufacturing Company) in my practice in April, this year, the first bottle having been sent to me by the manufacturing chemist, to give it a trial. I determined to test its virtues, and was so much pleased with the result that it has been adopted in my practice, and I have since the above stated time prescribed some 30 pounds. No objections to it, in any manner, have been made by any patients to whom I have prescribed it, and I shall continue to do so, believing it to be one of the most valuable and beautiful preparations of iron to which medical men have access in these days of intelligent and refined pharmacy. It has the following advantages, which increases its value to physicians: it exerts the therapeutic influence of iron without creating nausea, constipation, headache, or any of the unpleasant effects so often resulting from the use of the ordinary forms of iron. It is a proto-compound, very palatable, and readily assimilated. It forms clear solutions with compounds containing tannin, such as the gentian and cinchona preparations, properties which cannot be claimed for any ferruginous preparation of the Pharmacopœia.

G. T. Fox, M.D.

Bath, Pa.

News and Miscellany.

American Academy of Medicine.

The American Academy of Medicine met in this city, October 26th and 27th. The annual address was read by the President, Professor Traill Green, A.M., M.D., LL.D., of Easton, Pa. He referred to the organization of the Academy in this city, six years ago. He said one of the greatest obstacles to the improvement of medical education in this country is the deficiency of sufficient preliminary education in those who enter the profession. It is well known that but a very small proportion have had such previous training as is absolutely necessary in order to begin with advantage the study of a science. In 1876 the Medical School of Harvard was the only school in the country which required a preliminary examination of intending medical students. Now there are thirteen colleges which require the diplomas of a literary institution as a preliminary examination.

The President, in his address, also offered a number of practical suggestions.

The nominating Committee presented a report, which was adopted, and the following officers were elected to serve the ensuing year: President, Dr. Henry O. Marcy, Massachusetts; Vice-Presidents, Drs. George M. Beard, New York; William Elmer, Bridgeton, New Jersey; Cornelius R. Agnew, New York; Thomas M. Drysdale, Philadelphia; Secretary and Treasurer, Dr. R. J. Dunglison, Philadelphia; Assistant Secretary, Dr. Charles McIntire, Jr., Easton, Pa.

Drs. James M. Barton and Thomas B. Reed, of Philadelphia, were elected Fellows of the Academy.

On motion of Dr. Steiner, of Frederick, Md., it was agreed that at future meetings a collation shall be served after the delivery of the annual address.

Drs. Henry Frazer Campbell, of Georgia, and Austin Flint, Sr., of New York, were elected to honorary membership. A paper prepared by Dr. Nathan Allen, of Lowell, Mass., on the "Influence of Medical Men," was then read. It stated that at no former period in the history of medicine have the causes of disease been so carefully scrutinized. Never was there a time when the natural laws of disease could be studied to so good advantage—the principal cause and real nature of every distinct disease, and to learn that the whole mystery concerning disease arises mainly from ignorance. The profession has been inclined in the past to use altogether too much medicine, both in quantity and variety, which has produced serious evils. Drugs can never mend broken limbs, neither can they restore the system to a perfectly sound and healthy state when its inherent laws have been repeatedly violated Medical practice can never be reduced to a true system of test or science until the causes and laws of diseased action are better understood. Formerly *cure* was the supreme if not the leading object of the physician, but the time is fast approaching when *prevention* will be the watchword. No one question is coming before the public of such vital importance and magnitude as the prevention of disease, under the head of sanitary science. Its principles extend to the school, to the family, to the State, and to the Church.

Dr. Dunglison, from the Committee on Laws Relating to the Practice of Medicine in the United States, presented a supplemental report, which was referred to the Council, and the Committee continued.

Dr. Benjamin Lee, of Pennsylvania, said, this State, he was sorry to say, was one of the last to take steps toward the establishment of a State Board of Health.

Dr. Robert Lowry Sibbet, of Carlisle, Pa.,

said that this State was the home of quackery, and the city of Philadelphia had done a great deal to disgrace them. Over 6000 physicians have registered, 838 without diplomas. He then read a supplement to the Registration Act, to be passed by the Legislature in case of the establishment of a State Board of Health. It gives the Board of Health the power of receiving the registration of all practitioners of medicine and surgery.

Dr. Cornelius R. Agnew, of New York, said there was some discouragement in his State with regard to laws for the prevention of irregular practice. He had understood that, in consequence of the Registration laws of Illinois, about 2000 irregular practitioners have been driven out of that State.

Professor S. D. Gross, of this city, said he took a deep interest in this association, and was convinced the trees now planting by them would bear good fruit.

Dr. Charles McIntire, Jr., of Easton, Pa., read a paper on "The Academy and the Profession." It stated that in the Cumberland, Dauphin and Northampton counties, Pa., Medical Societies, and in the Medical Societies of Cumberland, Hunterdon, Monmouth, Salem, Warren and Atlantic counties, New Jersey, there were 222 members. Of this number, 28, or 12.6 per cent., were A. B.'s; 16, or 7.2 per cent., took parts of courses; and 178, or 80.2 per cent., had no college training. In 58 universities and colleges in the United States since 1820, there have been 38,054 alumni. Of this number, 3577, or 9.2 per cent., were graduates in medicine. The whole number of schools reported in 1879 was as follows:—Medicine, 68; Theology, 133; Law, 49. In 1880, Medicine, 72; Theology, 142; Law, 48. Number reporting no students at all: In 1879, Medicine, 2; Theology, 10; Law, 6. In 1880, Medicine, 5; Theology, 9; Law, 4. Actual number on which to base statistics: In 1879, Medicine, 66; Theology, 123; Law, 43. In 1880, Medicine, 67; Theology, 133; Law, 44. Number making no report of degrees in Arts and Science: In 1879, Medicine, 39; Theology, 53; Law, 19. In 1880, Medicine, 37; Theology, 68; Law, 18. Percentage of whole: In 1879, Medicine, 59.1; Theology, 43.1; Law, 44.2. In 1880, Medicine, 55.2; Theology, 51.1; Law, 41.0. Number of students reported by these schools: In 1879, Medicine, 5614; Theology, 2092; Law, 1218. In 1880, Medicine, 5279; Theology, 2537; Law, 768. Percentage of whole: In 1879, Medicine, 60.9; Theology, 48.0; Law, 40.3: In 1880, Medicine, 53.6; Theology, 49.9; Law, 24.5. Percentage of students in the schools reporting degrees in arts and sciences who have such degrees: In 1879, Medicine, 20.0; Theology, 59.0; Law, 43.0. In 1880, Medicine, 16.9; Theology, 52.6; Law, 32.0.

Only a small percentage of the estimated 83,000 practitioners of medicine in the United States are eligible for membership to the Academy, and only a small proportion of the graduates in arts study medicine. The need of a thorough preparation for medical men is certainly the cause for the Academy's existence, and the methods which will best cause this need to be felt are the methods which should claim the attention of the Academy.

If every practitioner in the country, or even a large majority, possessed the qualifications for fellowship, there would have been no reason for organizing the Academy.

After the induction into office of the President-elect, Dr. Henry O. Marcy, and the appointment of Dr. Benjamin Lee, of Philadelphia, and Dr. L. D. Bulkley, of New York, to fill vacancies in his council, the Academy adjourned to meet in the city of New York in September, 1883.

Dr. Klein on Vaccin Charbonneux.

The *Lancet* says that Dr. Klein has arrived at conclusions (based upon comparatively few experiments) adverse to the general adoption in England of Pasteur's proposal to inoculate cattle with anthrax, as a prophylactic. After giving particulars as to the way in which M. Pasteur's agent sells the "vaccin charbonneux," the directions for the use of which say that the "premier vaccin" is to be used first, and after a lapse of from twelve to fifteen days the "deuxième vaccin" is used in the same manner, Dr. Klein goes on to relate his experience with it. "I have obtained through two independent sources two lots of this vaccin charbonneux (premier and deuxième), and have tested them by experiments. The results of these experiments enable me to say—(*a*) animals inoculated with this 'vaccin' (premier and deuxième) are not made immune against fatal anthrax; and (*b*) both the first and second vaccin may produce fatal anthrax. The following facts prove these propositions:—

"*Experiments with Lot A.*—Inoculated with 'premier vaccin,' two sheep, two guinea-pigs and two mice; no change in any animal. Inoculated with 'deuxième vaccin,' the two above sheep and the two above guinea pigs. One of these sheep showed rise of temperature and falling off in food for the first two days after this second inoculation, but was all right again after three days. The two guinea-pigs were dead of typical anthrax within forty-eight hours. The above mice were inoculated with the blood of one of these guinea-pigs. Both mice were dead of typical anthrax within forty-eight hours. The two sheep having been inoculated with the premier and deuxième vaccin, ought to have been immune against fatal anthrax. Now see what happened: according to M. Pasteur, the *Bacillus anthracis* of blood of an animal dead of anthrax, when cultivated at 42°-43° C. for twelve days, loses all virulence and becomes thereby converted into 'vaccin.' I had grown the *Bacillus anthracis* of blood of a guinea-pig dead of anthrax at a temperature of 42°-43° C. for *twenty-one* days, and with this culture I inoculated the above two sheep. The result was that both animals were dead of typical anthrax within forty-eight hours.

"*Experiments with Lot B.*—Inoculated with 'premier vaccin' four guinea-pigs and six mice. Within forty-eight hours three of the guinea-pigs and three of the mice were dead of typical anthrax. My method of using the fluids for in-

oculation absolutely precludes any accidental contamination, and hence these must be accepted as perfectly reliable. This country is comparatively free from anthrax, and therefore the introduction and use of this so-called 'vaccin charbonneux' seems to me most dangerous, and capable of producing incalculable mischief."

Ophthalmological Statistics in the United States.

The following interesting statistics are given by Dr. W. S. Little, in a recent article: The statistics of ophthalmic hospitals and ophthalmic work in general hospitals in the leading cities of the United States afford the following: Of 107,383 eye cases, 19,037 required surgical procedures, of which 862 were enucleation of the eye for some of the many forms of objective traumatism; principally on account of the dread of or presence of sympathetic irritation or sympathetic ophthalmia of the other eye; some for intraocular conditions, and a few for cosmetic purposes.

Thus 17.7 per cent. of ophthalmic work is operative, and 4.5 per cent. is enucleation of the eyeball. This percentage for the operation of removal of the eyeball should be higher than the statistics derived from the public clinics, as this class of cases are more apt to seek private advice.

The importation of artificial eyes is about ten thousand annually, and recently the manufacturing of them has become a home industry.

Cholera Rumors.

Some severe form of intestinal disorder has been recently raging in Chiapas and Tabasco. It is asserted to be Asiatic cholera. Cases alleged to be of the same character have been of late occurring at Matamoras. In fact, from various parts of Mexico and Central America there are disquieting rumors of the presence of this dreaded pestilence.

The Question of Population.

The following, from the *Med. Times and Gaz.*, is interesting: In general, in Europe, the increase of Catholics, Protestants and Jews, compared with each other, is as one, two, three; but in France and Austria the increase of Jews is four and seven times greater than that of Catholics. This does not depend upon the greater number of births among the Jews, which is usually inferior to that of Catholics and Protestants, but the number of illegitimate births is very much less among the Jews than among the other inhabitants; and as the mortality of infants is especially noteworthy in the category of illegitimate children, the result is that, although the Jews have fewer infants than the Catholics and Protestants, they preserve a greater number of them. Another curious fact is the sex of the children. In the European population in general, this is about one hundred and five male to one hundred female births; but in most countries where Jews abound, as Russia, Prussia, Austria and Hungary, the proportion of male births rises to one hundred and ten, one hundred and twenty, or even to one hundred and thirty, instead of one hundred and five; and M. Lagneau attributes this great predominance of male births among the Jews to the fact of the early age at which they marry.

The Yellow Fever.

Nearly 2000 cases of yellow fever at Pensacola is a frightful showing. Fortunately the type does not seem excessively malignant. Meantime the local Board of Health there have fallen out, both with the city government and the U. S. Marine Hospital Service.

Items.

Errata.—In our issue of October 21st, page 463, line 13 from bottom, for one-sixteenth read *one-sixtieth*; line 12, for one-twentieth read $\frac{1}{120}$.

—A memorial statue of the eminent ophthalmologist, Albrecht von Grafe, was recently unveiled, in the University of Berlin, in the presence of a large assemblage.

—According to M. Dareste (*Comptes Rendus*), monstrosities may be produced, in birds, by simply prolonging the interval between the laying of the eggs and the commencement of incubation.

—An old lady who lives in Massachusetts heard that Mr. John Bright was going to visit this country. "Well," said she, "I hope he won't bring his disease with him."

QUERIES AND REPLIES.

A. McM. Mich. Dr. A. did violate the courtesy of the profession by the act described.

W. S. D., Pa. The following is a very good formula for making Bitter Wine of Iron.

R.	Ferri quiniæ citrat.,			
	Ferri et ammonii citrat.,	aa	ʒj	
	Syr. simp.,		Oiiss	
	Aquæ,		Oss	
	Ol. aurant.,		gtt xxv	
	Vin. xerici.,	q.s. ad	Cj.	M.

MARRIAGES.

GRAHAM—SHRADY.—At the St. James Methodist Episcopal Church, New York, by the Rev. Albert D. Vail, Thursday, October 12th, Mr. James Lorimer Graham and Miss Margaret Frances, daughter of Dr. John Shrady, all of New York.

SCOTT—CLARK.—In Wellsville, O., at the residence of the bride's mother, Mrs. Sarah F. Clark, widow of the late Rev. S. W. Clark, Thursday, October 12th, 1882, by Rev. J. A. Bailey, Robert E. Scott, M.D., of Bowerston, O., and Miss Agnes Clark, of Wellsville, O.

DEATHS.

YOUNG.—At Galveston, Texas, Aug. 3d, 1882, Dr. G. K. Young, in the 46th year of his age. Dr. Young was a graduate of the Jefferson Medical College.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Lecture.

ON ALBUMINURIA.

BY M. DREYFUS-BRISAC,

Of the Paris Faculty.

Gentlemen:—The preponderating place occupied by renal pathology in the scientific discussions and memoirs of the present day explains the incontestable predilection of contemporary scientists for all questions bearing on the urinary functions, whether in a normal or pathological condition.

Hence the numerous researches into the mechanism of urinary excretion in the normal condition, and into the pathogenesis of the diverse modifications it undergoes when disease is present.

Albuminuria is not only the dominating symptom of renal semeiology; it is also a very important symptom in acute general diseases, whether infectious or not. To determine, then, absolutely the pathogenesis of the disease would be of very great service, from a clinical and pathological point of view. This has no doubt been well understood by the numerous observers who have to this end experimented in many different ways. The question is yet far from being elucidated, but many erroneous opinions have been exploded, and we have at least arrived at certain elements for the definitive solution of the problem.

It will then be my duty to first lay before you what is at present known on the subject, and this is rendered comparatively easy by the remarkable memoir of M. Charcot (Leçons sur les conditions pathogeniques de l' albuminurie, Paris, 1881).

To commence with, is the expression "pathogenesis of albuminuria," absolutely correct at the present time, when there is a tendency to consider the transudation of albumen through the renal epithelium as not always denoting a pathological condition of these organs?

Can it be considered that this phenomenon may be, in some cases, a simple anomaly compatible with apparent good health, or may even exist, in a very slight degree, as a physiological fact? Such is the question which, first brought forward in vague terms by Vogel, has since led to numerous researches in England and Germany. Among these last is an important memoir by Senator, which has just appeared (l' albuminurie á l' etat de Santé ou de maladie. Berlin, 1882).

Although unacquainted with this work, except through the interesting analysis of it given by M. Lépine (*Revue de Médecine*, No. 6, 1882), and the compte-rendu published in the *Centralblatt* (June 24th, 1882), we will yet be able to indicate the principal conclusions at which he arrives. As observed by M. Lépine, it must be admitted henceforth, that a number of individuals, particularly young and feeble subjects, may have for months, and even for years, a certain portion of albumen in the urine without presenting otherwise any appreciable alteration of the general health. "This opinion, the knowledge of which is important to the practicing physician, is founded on a sufficient number of facts to perfectly establish its exactitude.

Nevertheless, the many observations of latent

albuminuria brought forward, since attention has been called to the subject, are far from being always conclusive.

In the first place, all cases must be eliminated where any renal affection has existed anteriorly or where the patient has had any of the infectious diseases, which, like scarlatina, has a predilection toward the kidneys.

On the other hand, the denomination latent albuminuria is not applicable to cases occurring, particularly in children, who, without presenting any well defined morbid type, are none the less in poor health or in a state of marked anæmia. Of such a nature are the observations published by Gull, Dukes and Moxon.

The conclusion to be drawn from these facts is that albuminuria may be present, under certain illy-defined pathological conditions, without any other morbid sign of renal origin and without any appreciable lesion of the organ itself.

In a second category may be placed the numerous observations of individuals absolutely healthy, who present albumen in the urine after great fatigues or muscular exertion (Marcacci), or violent emotions (Fürbringer). In such cases, which approach very closely to pathological conditions, the transudation of albumen may be attributed to rapid modifications in the constitution of the blood, or to a passing perturbation of the renal circulation, of nervous origin (Bamberger. *Wien, Med. Woch.* Nos. 6 and 7).

It would seem at first, that this hypothesis of a vaso-motor trouble, to explain transitory albuminuria, receives support from the well-known fact that albuminuria sometimes occurs just after a convulsive attack, particularly in epilepsy.

But does this post-epileptic albuminuria exist in reality?

It appears doubtful, after reading the memoir of Kleugden. According to this author albumen is often sought for, simply because there has been a convulsive attack, but it may have existed in the urine long before the attacks called attention to the renal function. He affirms that albumen can be found not only in the urine of epileptic patients, but also in appreciable quantities in the urine of many healthy individuals, if it be sufficiently concentrated; he affirms that he has found appreciable quantities of albumen in the urine of more than half the healthy nurses in the institution with which he is connected.

Kleugden thence concludes that any urine of high density may present traces of albumen; albuminuria would be then almost a physiological fact. Senator seems to incline toward this view, but without formulating any decided opinion.

This point reserved, Senator establishes the fact that well-characterized albuminuria, where the proportion of albumen is as high as one per thousand, is in no way incompatible with the existence of good health. It is not either a permanent symptom, for in almost all the individuals under observation, this form of latent albuminuria presents a periodic or rather an intermittent type.

Appearing at certain moments of the day, either in the morning, or after meals, and then disappearing spontaneously. Thus it continues, without any alteration of the general health, and therapeutic interference, milk diet, etc., do not bring the urine to the normal condition.

What is the mechanism of latent albuminuria? A dyscrasic state of the blood cannot be the cause, for the individual enjoys good health; for the same reason the hypothesis of an actual renal lesion cannot be sustained.

To attribute it to very marked slowing-up of the circulation (Bamberger) or to an original abnormal permeability of the glomerular membrane (Leube, Fürbringer), is simply seeking to mask our ignorance by a hypothesis which is not susceptible of proof. Perhaps, some day, in studying more minutely the conditions under which this latent albuminuria is produced, we may arrive at indications of great service for the elucidation of the pathogenesis of true pathological albuminuria.

Three theories are, as you are aware, put forward to explain the passage of albumen in the urine; each one of the theories has very able defenders, and undoubtedly possesses some elements of truth.

Albuminuria is always the symptom of a more or less pronounced lesion of the epithelium of the renal canaliculi; this is the anatomical theory. It is due to derangement of the renal circulation—the mechanical theory; and finally it is the direct consequence of an alteration in the blood itself, which is the dyscrasic theory.

The first, or anatomical theory, adopted by M. Lecorché in his classic treatise, can no longer be defended in the absolute form he gave to it. Without speaking of latent albuminuria, "how can be explained by this theory those cases of transitory, yet morbid, albuminuria, which do not accord well with the existence of a material persistent lesion?" (Charcot.)

Even where epithelial lesions exist, it is by no means proven that they induce albuminuria. Physiological experimentation has, in effect,

shown that the tubuli recti, and even the tubuli contorti, have a very secondary part in the transudation of albuminoid matters, and that these are exclusively filtered through the glomeruli.

If artificial albuminuria is produced by temporary ligature of the renal artery, or certain forms of nephritis be studied at their debut (Ribbert, Cornil), it will always be found that the first deposit of the albuminous matters takes place in the capsule of the glomerule. The organic lesion cannot then account for the albuminuria, when it is limited to the tubuli recti and contorti, as it is in catarrhal nephritis. In nephritis affecting the glomerule, this theory would seem to have more foundation in fact.

It can be easily understood that an irritative condition of the glomerular membrane, produced by a substance like cantharides, or by a parasitic agent, as in scarlatina, may give rise to modifications of the structure and functions of the glomerular apparatus, whence the free passage of the albumen of the blood into the urine. But, as we will soon see, the renal traumatism and the lesions which then result, constitute but the second act of the morbid process; the first consisting in an alteration of the albuminoid elements of the blood, which act as foreign bodies in irritating the epithelial lining of the glomerule.

Thence the domain of the anatomical theory becomes very much restricted, the more so that in the infectious diseases, as we have elsewhere shown (*Gaz. Hebd.* 1882), the albuminuria is often due to the dyscrasic state of the blood.

The mechanical theory reposes on more solid foundations, particularly if modified by the new indications furnished by recent physiological data.

It would seem, as M. Charcot has established, that it was necessary to abandon the old opinion that albuminuria is due to an augmentation of pressure in the circulation of the glomerule. The classic experiments of Goll and Stockvis show that an excess of pressure in the renal vessels of the kidney does not suffice to produce albuminuria; and those of Overbeck and Rüneberg show that a fall in the pressure is a more favorable condition for the transudation of albumen.

But another factor of preponderating importance requires consideration; this is the slowing up of the course of the blood.

Posner and Litten, as also Bamberger, insist on this point.

Here are, however, the very explicit conclusions of M. Charcot on the subject:—

"In all cases where troubles of the general or local renal circulation give rise to albuminuria, it is not the augmentation or diminution of pressure in the intra-glomerular circulation which must be incriminated; it is the slowing-up of the blood current, and on this account the prolonged sojourn of blood containing very little oxygen in the renal capillaries."

Thus in conjunction with a purely mechanical perturbation of the circulation, another element is brought into play, the anoxæmia of the epithelial cells of the glomerule. Under this form the mechanical theory accounts for the albuminuria occurring in diverse morbid conditions, as in cardiac disease, the cyanotic state of cholera, and even in certain febrile states. But as regards true Bright's disease, is not the dyscrasic theory more satisfactory? This is what we will attempt to elucidate, relying principally on the works of Semmola.

The dyscrasic theory had for partisans such eminent clinicians as Bright, and Graves, and Gubler; unfortunately their conceptions, of exclusively theoretical origin, reposed on no direct proof. Thus no well-marked fact has justified the supposition of Gubler, "that the excess of albumen in the blood, relatively to the proportion of the globules and to the loss of the body in proteic matters, is the ordinary cause which determines albuminuria.

This doctrine was abandoned for that which invokes a modification, not quantitative, but qualitative, in the albuminoid constituents of the blood; this is the theory of Semmola which M. Jaccoud has formulated in these terms in his thesis of 1860:—

"Albuminuria recognizes as cause a deviation from the normal type of the processes of nutrition. This deviation consists in a temporary or durable perturbation in the phenomena of assimilation or disassimilation of albuminoid matters."

The albumen, altered and modified in its chemical or molecular composition, is a foreign body in the organism, and not being assimilable will be eliminated.

Evidently, in order that this theory, particularly applicable to Bright's disease, should be acceptable, it was necessary to prove that these alterations of the albumen of the blood really existed. It is on this question that discussion has been most bitter. Until recently it seemed to turn in favor of the adversaries of Semmola's doctrine, through the researches of Stockvis. This eminent observer affirmed that in albuminuric patients the albumen of the blood is not modified, from a chemical point of view; and

that, on the other hand, the coagulable principle of the urine does not differ from the normal serum of the blood.

But these conclusions have been proven partly false by numerous researches. The presence of abnormal albumen, differing from the ordinary albuminoid principles of the blood, has been frequently reported. On the other hand, M. Lépine has shown that the albumen contained in the urine has special characters at the period of digestion (more rapid diffusion, more prompt peptonization). In the same way tend Prof. Bouchard's works (1°. De l'albuminurié dans la fièvre typhoids, 1881, p. 325; 2°. Des nephrites infectieuses, 1882, p. 21).

Finally, in recent memoirs, read before the Congrès d'Amsterdam, Semmola brought forward new facts to the support of the dyscrasic theory as regards Bright's disease. To demonstrate that this alteration of the albuminoid principles of the blood is not imaginary, he studies their degree of diffusibility in serum, and finds that it is only in Brightic patients that they can be more or less completely diffused, according to the gravity of the disease.

And as these altered albuminoid matters, improper for assimilation, should be rejected from the organism, he has sought for, and found, albumen in diverse secretions ordinarily non-albuminous—in the bile, the sweat, the saliva. Whence the conclusion, that in Bright's disease the albumen of the blood plays the part of an excrementitial substance, and, if it passes largely by the kidneys, it is because these are the excrementitial organs par excellence.

Then, according to this theory, Bright's disease should be thus interpreted: primordial alteration of the albuminoid matters of the blood, causing their elimination by the diverse excretory apparatus, particularly the kidneys; consecutive trouble of the function of the glomerule, and finally organic alterations of the renal parenchyma, which are the consequence and not the cause of the albuminuria.

It remains for me, as a conclusion of this brief study, to consider the part of each theory in the pathogenesis of albuminuria.

1st. The cases of albuminuria imputable to a primitive organic lesion of the renal parenchyma, or of the glomerular apparatus, are those where the blood contains an irritating principle, as cantharides, or an infectious micro-organism, and even in such cases there may have been a primordial alteration of the blood globules.

2d. If troubles of the circulation produce albuminuria, it is by a different mechanism from that admitted up to the present; the transudation of the coagulable principle is due to the slowing up of the course of the blood, with anoxæmia of the glomerular cells.

3d. Bright's disease is but the symptomatic expression of a chemico-molecular alteration of the albuminoid matters of the blood, of a dyscrasic state, in fact.

This "leucomuric diabetes," as Gubler termed it, should be considered in the same category as saccharine diabetes, in the class of diseases to-day so comprehensive, caused by a deviation from the normal nutritive processes.

Communications.

HEPATIC COLIC (SO CALLED) FOLLOWED BY THE PASSAGE OF A LARGE BILIARY CALCULUS.

BY H. C. YARROW, M.D.,
University of Pennsylvania.

Read before the Medical Society of the District of Columbia.

Mr. President and Gentlemen:—I desire to exhibit this evening a large biliary calculus, recently passed by a patient of mine, and with your permission, will read my notes of the case, alluding to a few reports of similarly large gall stones.

Was called to see Mrs. X, a widow, aged 51, February 25th, 1881, at 5 o'clock P.M., and found her suffering from intense paroxysms of pain over and in the right hypochondriac region, which she was inclined to consider were due to an attack of sub acute gastritis, she having suffered from this disease for a number of years. The pain seemed to commence a little below the right nipple and extended to the umbilical region, the duration of the attack being about five minutes, with an interval of perhaps ten minutes. Her temperature was normal, the pulse slightly accelerated only, tongue coated with a heavy yellowish fur; the conjunctiva was yellow, and there was general icterus of the face; she had also some nausea, although she did not vomit while I was present. The patient's history of the case is as follows: About two weeks previous to my visit she had a general feeling of malaise; her head was dizzy and her bowels constipated; she took some domestic remedies, but continued in pretty much the same condition until within forty-eight hours of my visit, when she vomited freely. During this period of two weeks she had no cramps or colicky pains whatever, but on the morning of

Saturday, the 25th of February, at 7 o'clock, the first pains commenced, which increased in intensity up to the time I saw her, at 5 P.M., but which did not reach their acme until 7 P.M. After watching by the bedside for a few minutes and hearing the patient describe the pains as of a tearing or lacerating character, I made up my mind that a biliary calculus was passing through the ductus communis choledochus and having little faith in the internal administration of the various remedies which have been proposed for the purpose of dissolving engaged calculi, I simply gave her morphia in sufficient quantity to narcotize, trusting that time would relieve her sufferings. In addition, she was rubbed downward from the point where the pain commenced to the point where it ended. As I have remarked, the acme of pain was reached at 7 P.M., after which time she vomited large quantities of bile, and gradually became easier, so that when I again saw her, at 10.30 P.M., she was quite comfortable. She was ordered a dose of cathartic medicine for the morning, and the family requested to be on the watch for anything suspicious that might appear in the stools.

The calculus was passed Monday morning, February 27th, at 3 A.M., and within 48 hours, with the exception of a little intestinal soreness, she seemed quite well.

Apart from the large size of the calculus, the most interesting fact of the case is the apparently short time that was required for the passage of the stone from the gall-bladder, through the cystic and common duct into the duodenum, for, if we count the time, we find that the process required from, say 7 A.M. of Saturday until 7 P.M. of the same day. Another feature of interest is the passage of the stone, large as it is, through a tube so small as the common duct; although a number of cases have been reported of the passage of larger stones, in most of the instances communication has been established between the gall-bladder and intestine by a process of fistulous ulceration. This procedure, however, takes time, and I do not think it happened in my case. I have looked over the literature of biliary calculi, and will relate briefly a few histories of interesting cases of very large stones. To my friend Dr. Lamb I am indebted for the history of the largest biliary calculus at present in the Army Medical Museum, and he has also kindly furnished me with a great number of references to cases in which the duct has been enormously enlarged; these would be given did space permit.

"Two very large biliary calculi, passed by stool after symptoms of obstruction of the bowels, by a middle-aged man; one of them an inch long by an inch in diameter, and weight 182 grains; the other, $1\frac{1}{8}$ inch in diameter, weight 154 grains; each of these calculi is a truncated segment of a cylinder, the terminal facets passing obliquely to the axis, giving them the form of blunt wedges. They do not fit together, so that there must have been at least three others in the gall-bladder at the same time with these. They are composed wholly of cholesterine, with a little pigment. Subsequent to the passage of these calculi, the patient had symptoms of peritonitis. The patient was rather a fat man, about 50 years of age, with no previous history of hepatic colic. When seen by Dr. Toner, in the latter part of August, 1874, he was suffering from marked symptoms of obstruction of the bowels. When, at length, the passage was obtained, the two gall stones above described came away with it. Another, of considerable size, was passed subsequently, but not preserved. The patient is not aware of having passed any others. After the obstruction of the bowels had been overcome, severe peritonitis set in, so that for several days the patient's life was despaired of; he, however, recovered, and by the middle of September was quite well again."

The specimen was contributed by Dr. J. M. Toner, of Washington, D. C.

Rapin, in *Bulletin de la Societé Médicale de la Suisse Romande*, 1874, viii, 446, speaks of a calculus passed by a lady, aged 35 years. Taken sick, suddenly on the 8th of October. On the 11th was much worse; up to 18th suffered frightfully, with bilious vomiting; no icterus. On the 18th, as Dr. Stroehlin palpated the right flank of the patient, there was a sudden cessation of pain. On the 20th purging occurred, and finally, a stone of an oval shape was passed; in the evening another was passed. The first stone weighed 17 grams, was 4 centimeters long, and its greatest width was 3 centimeters. The second was the size of a bean. It is thought by the author that the common duct had enlarged sufficiently to allow of the stone passing.

Leared, in the *Transactions* of the Pathol. Soc. of London, 1865, xvi, 159, speaks of a biliary calculus, shaped like an olive, $1\frac{1}{4}$ inches long and one inch in diameter, passed per anum, by a woman, after 30 hours of pain and suffering, with vomiting.

Dr. James S. Bailey, *Phila. Med. Times*, 1874, iv, p. 683, found in the gall bladder of an old lady, after death, a gall stone weighing 294

grains. Patient 76 years of age. Considerable trouble experienced during life.

Dr. Benson, in *Dublin Med. Press*, 1851, xxv, 337, relates a case in which, after many severe symptoms in a patient, a male, 56 years old, which lasted nine months, a biliary calculus, the size and shape of a walnut, weighing over half an ounce avoirdupois, was voided per anum, 4½ inches in circumference, lesser size 3½ inches; thought to have passed through the duct. He, Dr. Benson, to prove the dilatation of the common duct, exhibited one that was as large as a dollar, taken from a patient of the late Mr. Todd.

A calculus is described by Dr. G. Collins, in the Boston *Medical and Surgical Journal*, 1858, lviii, 120, which was ten inches long, $1\frac{5}{16}$ inch wide, and weighed six drachms. Symptoms commenced, in female, aged 50, on February 7th, and on the 14th of March, 42 days afterwards, the calculus presented at the anus and was removed by the finger.

Dr. L. Condit, *New Jersey Medical Reporter*, Burlington, 1851-2, vii, 393, relates a case of calculus, 1¼ inch long, 3 inches in circumference, weighing ℥ ss and ℥ ss, which was passed from rectum after four days of severe illness, and which caused the death of patient. Post-mortem showed that a direct communication existed between the gall-bladder and the duodenum, the common duct being obliterated.

A number of other interesting examples might be given, but I do not desire to trespass too much on good nature. As to the treatment of biliary calculi, the subject is one that has been discussed for ages, and the text-books will furnish very much better advice than I can give.

The calculus which I now exhibit needs no detailed description; it is obviously a monolith, and weighs, or did weigh, the day of its passage, 143 grains and a quarter. It lost probably 10 or 15 grains in the washing it received before it came into my hands. It has not been examined to determine its composition, but it is probably composed, in great part, of cholesterin.

The wood cut, from an actual size drawing, by my friend, Dr. McConnell, of the Army Medical Museum, offers a good representation of this large calculus.

—Fears are entertained that the cholera, now raging in the East, may be carried into Europe.

DISLOCATION OF THE SPINE—REDUCTION—DEATH AFTER TWELVE DAYS.

BY J. S. WIGHT, M.D.,

Professor of Operative and Clinical Surgery at the Long Island College Hospital.

Mr. M. S., 62 years of age, born in Ireland, Port Warden, on the morning of June 3, 1882, fell into the hold of a vessel, a distance of about fifteen feet, upon the edge of a bale of jute, striking the small of his back, and was conveyed to the Long Island College Hospital, near ten o'clock in the forenoon, where I saw him on his arrival, and made note of the following points: The shock was very great; there was complete paralysis of sensation and motion in the lower limbs; the pain in the back was severe; the last dorsal vertebra with all the lumbar vertebræ projected backward; the eleventh dorsal vertebra with the rest of the dorsal vertebræ projected forward; the antero-posterior displacement was about one inch. The diagnosis was dislocation of the spine between the eleventh and twelfth dorsal vertebræ, complicated with fracture, the cause being direct violence.

A consultation was held at two P.M., on the day of the injury, when it was decided to make an attempt to reduce the dislocated segments of the spines: Drs. Burge, Mason, Atkinson and Wight were present at the consultation. The time set for the operation was four P.M., two hours later: The patient had just vomited, and it was thought that he would be in good condition by that time.

The operation was performed at four o'clock: Prof. Ford, Drs. Burge, Atkinson, and Wight were present. I operated in the following manner: After the administration of ether, I requested Dr. Atkinson to reach over the patient from above and put a hand into each axilla; Prof. Ford and the surgical interne each took hold of a foot; Dr. Burge watched the pulse and respiration: I then put an ordinary pillow under the patient's back, so that the pillow was about equally under each segment of the dislocated spine, and put my right hand under the upper end of the lower segment, and then put my left hand on the sternum: Then Dr. Atkinson made careful upward extension, and Prof. Ford and the surgical interne made downward extension, and at the same time, I pressed upward with my right hand and downward with my left hand, when about two-thirds of the distance of displacement disappeared, giving slight crepitus; two or three similar attempts did not effect any change in the position and relation of the segments: I then directed Dr. Atkinson to

raise up the shoulders of the patient, making extension at the same time, and then lowering the shoulders, during which manipulations I again pressed upward with my right hand on the upper end of the lower segment of the spine and downward on the upper segment with my left hand on the spine, when the segments became so completely reduced to the position they were in before the injury, that it was not possible to detect any material displacements. The pillow was left under the back. The patient was in good condition when the influence of the ether passed away.

The following points of interest in this case may be noted :—

1. There was retention of urine from paralysis of the bladder, complicated with stricture of the urethra. I found it impossible to get a catheter into the bladder ; I succeeded in introducing a whalebone guide through the stricture, and the next day I put a divulsor over the whalebone guide, into the bladder, and divulsed the stricture to the size of a number twelve sound ; then I introduced a number eight catheter, and kept it in the bladder, directing the urine to be drawn off about every three or four hours.

2. In two or three days after the reduction of the dislocation, the patient could make slight motion of his lower limbs, he could perceptibly rotate the feet and legs. He would will to move his legs, and after some twenty-five or thirty seconds the rotation of the feet and legs could be seen. This slight return of voluntary motion lasted about seven or eight days, and then completely disappeared. The patient never had the least sensation in his lower limbs, all sensation so far appeared to be lost. Hence it would appear that the sensory tract of the spinal cord had been more damaged than the motor tract.

3. The bowels were moved from time to time by stimulating enemata, but were very constantly distended with gases, giving considerable annoyance. The quantity of urine varied from 32 to 52 ounces in the twenty-four hours. The divulsion and laceration of the tissues constituting the stricture did not appear to do any special harm. The temperature varied from normal to 102°. The pulse varied from 60 to 104 per minute.

4. While the friends of the patient were told that he could not recover, they were quite hopeful that all would be well, and one doctor told a special friend of the patient that he had treated such a case and recovery had taken place. Is not judgment as rare as human charity? The patient grew weaker and weaker, and died quietly, at half past five o'clock, P.M., June 15th, 1882. No bed-sores had formed. And I regret to say, that the friends did not permit a post-mortem examination.

DIPHTHERIA A CAUSE OF DEAFNESS; NOT ONLY IN SCHOOL CHILDREN, BUT ALSO IN ADULTS.

Abstract of Paper read before the American Medical Association, in 1882.

BY LAURENCE TURNBULL, M.D.,

Aural Surgeon, Jefferson Medical College Hospital, etc.

In this paper there is carefully detailed the influence of defective arrangement of water-closet and drainage, in which sewer-gas charged with diseased germs affected three persons with diphtheria and another with catarrhal pneumonia, and showing that pharyngeal catarrh increased the predisposition to diphtheria. The Doctor is of the opinion that it is very rarely, if ever, of spontaneous origin, but is propagated from secretions, etc., of person to person in the same atmosphere. He dwells upon the mortality, giving his own observations as well as those from the Florentine epidemic, and he considers that it is more fatal in children of syphilitic or scrofulous parents than in those of good health. The symptoms and course of the disease is then treated in a typical case, with the treatment both general and local. The sequela is given, showing the paralysis of the muscles of the soft palate and pharynx, with its extension into the Eustachian tubes and middle ear, followed by deafness, which was treated by local agents and galvanic currents with marked success. His method was the introduction of the intra-tympanic catheter into the Eustachian tubes by means of a platina wire tipped with a copper ball. He states that it is of great importance to watch carefully diphtheria in young children, as at about the termination of an attack the inflammation may pass into the external meatus, or by means of the throat, into the Eustachian tubes or mastoid cells. This diphtheritic inflammation is sometimes fatal, and often impairs the delicate arrangements of the middle ear, more especially in syphilitic or scrofulous children, and even in those of apparently good sound health, unless promptly treated. In his examination of school children, he finds a large number deaf from this cause; and in another paper dwells more at length on this important subject. The paper concludes with a report from Dr. Morris Longstreth, Microscopist of Jefferson Medical College Hospital, of a careful micro-

scopic examination of a portion of the diphtheritic membrane removed from the post-nasal and Eustachian tubes, which throws some light upon this obscure but yet very important subject creating so much interest at the present day.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINICAL LECTURE BY WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Fibroid Tumor of the Uterus.

Gentlemen:—Our first patient presents the following history: "She is 33 years old; has been married two and a half years and is sterile; she has always had dysmenorrhœa and leucorrhœa. Since marriage she has been worse, the menses coming on every two weeks and lasting four or five days. She has a radiating pain in the left iliac region, a hot pain in the back, and a dragging sensation in the pelvis." The hot pain in the back does not mean anything in particular. It probably comes from nervousness; but the bleeding does not. It means something else and of graver import. She is 33 years old and sterile; from this, I should say that she has not cancer of the womb, for it is so rare for a woman who has never borne a child to have cancer of the uterus, that you may practically exclude it in an off-hand diagnosis. Exceptions to this rule do occur, but, as I have said, they are exceedingly rare.

Where bleeding comes on every two weeks in a sterile woman, we should look for a tumor. Most probably we shall find a polypus or a fibroid tumor. A polypus usually causes intermenstrual dribbling of blood. This case proves to be one of fibroid tumor.

I shall now make an examination per vaginam. The cervix is very small, and I can barely find the os. I introduce the sound and it disappears up to the handle. It causes a slight serous, semi-purulent discharge, which is frequently seen in cases of fibroid tumor. By the by, I have not examined this woman *secundem artem*. Before passing the sound, I should have asked when she had last seen her monthlies. The woman may have been pregnant. Physicians are apt to blunder sometimes. A woman comes to the office not knowing that she is pregnant, or she knows it and wishes an examination for a special object, and unless the doctor is on his guard he may bring on a miscarriage.

The sound has gone posteriorly, and I feel the point of it to the right of the umbilicus and about an inch above it. The tumor probably occupies the right side of the womb, anteriorly. Removing the sound, I find that it gives a measurement of nine inches. This shows that we have a foreign body in the womb, and we know that it is a tumor. Practically, the only tumor of the womb is the fibroid tumor. Sarcoma sometimes occur, but they are very rare. As we have such a large measurement, the tumor must be located in the walls of the organ.

I now examine the abdomen, in order to determine the presence or absence of fluid. This sort of a tumor deceives the physician, by making him believe that it contains fluid. In the first place it is a soft tumor, a soft fibroid, or, as it is often called, a soft myoma; and in the second place, a thrill is conveyed to the finger by the subcutaneous fat. Women with fibroid tumors retain their fat, while with ovarian tumors they emaciate rapidly. This I believe to be a soft myoma.

In regard to the treatment: I wish that this woman was forty-three years old instead of thirty-three, for then we might hope for benefit from the change of life. We, however, must resort to drugs. A good remedy is the chloride of ammonium, in ten-grain doses after meals. I usually give it in a teaspoonful of cinnamon water, which is an oxytocic, and at the same time helps to disguise the taste of the drug. I give it after meals, because it is then less likely to cause disturbance of the digestion. Before each meal I order ergot. She must regulate the dose herself. I direct twenty drops to be taken in a wineglassful of water, and if this does not make her sick at the stomach, and does not cause pain in the uterus, I tell her to increase the dose to 25, to 30, up to 60 drops or more, until it gives her pain in the womb. I should much prefer, however, to have her in the hospital, where I would give her hypodermic injections of Bonjean's ergotin, or of sclerotic acid, giving of the former a syringeful, or of the latter half a grain. If the hypodermic needle is buried deeply in the abdominal walls, there is but little danger of abscesses.

What is the rationale of this treatment? But first let me tell you that there are three kinds of fibroid tumors; one variety is located inside of the womb, beneath the mucous membrane. These are called sub-mucous. A second is found in the walls of the uterus, the interstitial or mural; and a third on the surface of the womb beneath the peritoneum, sub-peritoneal or surface tumors. The uterus is really a muscle, and if the tumor is within its wall, it is surrounded by muscular tissue. Ergot causes a tonic contraction of the uterine muscles, and we have the blood vessels so pressed upon that the tumor is shut off from its blood supply and gradually atrophies. In some cases ergot produces the most remarkable results, while in others it entirely fails. The chloride of ammonium is a good alterative and absorbent, and is useful in all glandular enlargements. In its action it somewhat resembles mercury.

I shall have this woman report in two weeks, that we may note the progress of her case.

Abdominal Tumor, Probably Ovarian.

The next patient is 35 years of age; married and has had one child, which is now 14 years old. The labor was not a difficult one. Four years ago she noticed a fluttering in the left iliac region, which lasted for a year. That was a nervous feeling. These flutterings are sometimes very extraordinary. We used to have a patient who came to us year after year, stating

that she was pregnant, and that she felt the mo tions of the child. Nélaton, a French surgeon, tells the story of a lady who, after having consulted many physicians, came to him, stating that she had been pregnant for a long time, and that from the period it had lasted, she thought it must be a son. Nélaton asked her how many years it had lasted; she replied "twenty one years." "Well, madam," rejoined Nélaton, "the best thing you can do is to swallow a tutor for that boy."

After the fluttering had continued for a year, she noticed an enlargement in the left iliac region. This has gradually increased until the abdomen has reached the size of the eighth month of pregnancy. At times this tumor causes considerable pain. She has been steadily losing flesh. The tumor has been growing pretty rapidly.

Examining the abdomen by palpation I find a bosselated tumor. At some points the tumor is evidently solid, but at other places there seems to be fluid. I also feel a friction fremitus, as though the peritoneum had been roughened. By the vagina, I find that the womb moves when pressed by my finger. The sound passes three and a half inches. The womb can be easily moved by the sound, showing that this tumor is independent of the womb.

I shall give this lady ten grains of the bromide of potassium in the compound infusion of gentian three times a day, and have her report in two weeks.

Why do I give the bromide of potassium? In the first place, I have to give her something; and remember that you have to sometimes give medicine when there is no indication for it. Patients feel that they ought to be taking something. In the second place, she is nervous, and the bromide will make her more comfortable and help to prevent her from worrying about her condition. I give it, however, more for its moral effect.

My impression is that this is a tumor of the ovary, but as to its character, I am not prepared to say. I am afraid that it is malignant. It may be a partly fibroid and partly cystic tumor of the ovary. The womb is clearly not implicated, unless united to the tumor by a long band. If the tumor goes on increasing, I shall make an exploratory incision. This possibly might be a tumor of the omentum, but I do not think it is, because the symptoms began on one side. As the trouble was first noticed on the left side, it is probable that the left ovary is the one involved. It is humiliating to think that only half an inch of flesh prevents me from making a positive diagnosis.

Cancer of the Vagina.

This patient is 50 years of age, and has had eight children, the youngest of which is 13 years old. About one year after the last confinement she had a severe hemorrhage, lasting for three and a half weeks, and at each succeeding menstrual period she had menorrhagia, accompanied by severe pains in the head. For the past six years there has been a discharge of clots, the periods lasting for three days. Last spring she had a hemorrhage, with severe pain and the discharge of large clots. Since then there has been no hemorrhage, but a profuse watery discharge, offensive in character.

When a woman who has borne children and is over forty comes to me and says that the change of life has occurred, and that some time afterwards she began to bleed, I expect to find a cancer, and in nine cases out of ten I am correct. If a woman gives me this history, I inquire if bleeding is caused by coition, and she usually tells me that it is. This shows that there is something against which the male organ impinges. It may be a polypus, but usually it is a cancer. When a woman of about forty comes to you and states that the menses instead of diminishing have gone on increasing in amount, you may find a fibroid tumor, or a polypus, but often you will find a carcinoma.

As I expose the parts you see a tumor projecting from the vulva. It presents the appearances of a true malignant growth. It is by no means common for carcinoma to appear externally. This has, I think, commenced at the cervix, implicated the vagina, and grown externally.

In my remarks on the first case, I said that cancer was very rare in sterile women. Why is this? It is because the disease has its seat in a tear of the neck of the womb. The cervix is lacerated; this leaves a raw surface which, by constant irritation, degenerates into a cancer.

I intend to remove as much of this growth as possible. In so doing I shall use these curettes, which are serrated on the edges. I shall work rapidly, and thus diminish the loss of blood, but if troublesome hemorrhage does occur, I would not use Monsel's solution, for it forms hard plaster-of-Paris-like clots, and corrugates the tissues to such an extent that I should have to postpone the operation. I have here a bottle of ordinary vinegar, which is an excellent hæmostatic, and if necessary, I shall inject that.

The vagina is a bad place to have cancer, because the tissues between the vagina and rectum are so thin that it is impossible to thoroughly remove the diseased structures. This makes the third case of cancer of the vagina that I have seen within a week. Let me give the history of one of them. A lady, aged 43, living about thirty miles from the city, had for some time past lost so much at her monthly periods that she thought the change of life was coming on. Last Saturday, while having the bowels moved, a large quantity of fæces passed from the vagina. She became very much alarmed, and a physician was sent for, who pronounced it to be due to a carcinoma of the vagina. This was a terrible blow to the lady. She could not believe that she had a disease of that kind. They sent for me, and I was to have gone on Sunday, but owing to the wash-outs on the railroad, I could not go until Monday. When I entered the house the husband came to me and begged me to give them some hope, and told me not to express my opinion to his wife (I make it a rule never to do so, anyhow). I made the examination, and found that it was a cancer of the vagina, which had opened into the rectum, and that it was absolutely useless to perform any operation. A case entered my office day before yesterday, in which I found exactly the same thing.

I shall not use here, as I usually do in cancer of the cervix, the actual cautery, for it would be of no earthly use. This operation is not going to cure her; it will benefit her for a while, but the disease will soon return.

Gentlemen, you can never overlook a cancer, you may mistake something else for cancer, but you will never mistake a cancer for anything else. If it affects the cervix, you will find an excavated sore, filled with rough, friable granulations and with a sharp edge around it. This crater-like feeling is unmistakable. The growth is usually an epithelioma, but it is said that it sometimes begins as a scirrhus, and eventually becomes an epithelioma.

After the operation I shall treat this sore with iodoform in large quantities. This is a good remedy in cancer. I do not know that it ever cured a case, but it retards the return, makes the patient more comfortable, and prevents her neighbors in the ward from suffering from her presence.

There is not much bleeding, but I shall inject some vinegar. This syringe does not draw the liquid up very well, and I thought the nozzle had been split. It would then illustrate one cause of sterility in cases of laceration of the cervix. During coition, at the height of the orgasm, there is undoubtedly a suction action exerted by the womb, but if the cervix has been torn, it cannot draw up the semen that lies beyond the split. If I were treating this case outside of the hospital, I should tie a string around a sponge which had been dipped in vinegar and leave it in the vagina, to prevent any danger of hemorrhage.

She will have but little pain from the operation, and in my experience, malignant diseases of the pelvis are very free from pain; but to be on the safe side, I make it a rule to use suppositories of the aqueous extract of opium. I give these because, as she is now under the anæsthetic, I could not administer opium by the mouth, and we also, by the suppositories, bring the drug very near the part which we desire to affect; the nearer we get the more marked will be the effect. I prefer the aqueous extract to the other preparations of opium, because it is not so apt to cause sickness of the stomach.

When the discharge of pus begins, I shall give quinia, to prevent septicæmia, using 12 grains during the day. If the temperature should rise, enough will be given to cause buzzing of the ears. We shall use antiseptics and deodorant injections of permanganate of potassium, which is, I think, one of the best antiseptics. It has but one objection, and that is, it stains the clothing. On that account I sometimes use injections of carbolic acid.

WESTERN PENNSYLVANIA HOSPITAL.

SERVICE OF JAMES M'CANN, M.D.

Reported by T. M. T. McKennan, M.D., Surg. Resident.

Case 1. Fracture at Base of Skull.

John Sanders, age 23 years, a fireman on the railroad, was brought into the hospital July 29th, 1882. His injury was caused in the following way: He was upon the cab of the engine when about to pass under a coal tipple, and was struck on the back of the head and knocked upon the tender. Being immediately brought to the hospital, he was found to be in the following condition, to wit: He was in a state of semi-consciousness, with his knees drawn up. He lay quiet, but upon being spoken to sharply opened his eyes and responded. Pulse 92. Bleeding at the nose slightly, and profusely from the left ear. No mark of violence was found. Was given five grains of potass. bromid. every hour. The bleeding from the nose stopped in two hours, but that from the ear still continued. The blood from the ear was venous and rapidly becoming lighter in color, until, within six hours, it was of a light straw color.

The next day, July 30th, his condition had changed. He was very restless. Pulse at 56. The left pupil was dilated, while the right was normal. An ice cap was applied. Ten grains of calomel was administered and the following also ordered: Fifteen grains of potass. bromid. and twenty gtts. of fluid extract of ergot, every three hours.

The discharge from the ear is still very profuse and straw colored.

The next day, July 31st, his condition is about the same. Discharge from ear lessened and stopped August 1st, after continuing 72 hours. Ice cap still kept up. Bromide and ergot continued. Pulse 56. Bowels moved freely. He talks in an irrational manner. Is still restless. He remained very much in this condition for about two weeks, when he began to improve. His left eye had a peculiar cast, the pupil being dilated still. His mind is clearing up, although he is very much like a child, and remembers very little of his past life, but he is improving every day. Discharged August 19th, his mind improving slowly, and we have since heard that he has entirely regained all his mental faculties.

Case 2. Hydatid Cysts of Liver and Spleen.

Mrs. R., age 36 years, admitted July 31st, 1882. She is a German, and has only been in this country one year. Has been married six years, and has two children. The last only ten months old. Three years ago she noticed an enlargement of her abdomen, near the liver, and consulting a physician in Germany, was told she had a disease of the liver, but he did not state its nature. No inconvenience, however, resulted from it until six months ago, when it began to increase rapidly, and at the same time the left side commenced to enlarge. This is since the birth of her last child, which is ten months old.

Present Condition.—The woman is five feet in height, weighing 100 pounds. Hollow cheeks and complexion of a dusky color, resembling very much that of Addison's disease. Abdomen very much distended. On inspection, two prominences are noticed, one on right side, in right lumbar region, the other in left lumbar region, and is the most prominent.

Palpation.—Fluctuation is distinctly felt for several inches around the prominences indicated, but not over the entire abdomen nor in the umbilical region.

Percussion.—Dullness is found to extend all over the epigastric, hypochondriac and lumbar

regions, and all the umbilical except the lower part. The hypogastric region is tympanitic, as are also the inguinal regions.

Aug. 5th. The cysts were tapped to-day by means of the aspirator, and 12 ounces taken from the right side, while 72 ounces were taken from the left side.

Chemical examination of the fluid showed it to contain no albumen, but an abundance of chloride of sodium. Specific gravity, 1.004.

Microscopical Examination.—In two drops of the fluid quite a number of ecchinococci were found, which rendered the diagnosis of hydatid cyst conclusive.

She was ordered 15 gtt. of acid. muriat. dil. every four hours, also 15 gtt. olei terebinthinæ three times a day. She appeared much relieved by the tapping, and said she felt much lighter. She improved somewhat in the next two weeks, but at the end of that time again became worse. The cyst on the left side had again filled, and upon being tapped was found to contain almost pure pus. She rapidly grew worse, and upon the 27th of September, died. A post-mortem revealed the following: Adhesion of liver and spleen to abdominal wall around the places corresponding to the punctures made by the aspirator. Spleen and liver both enormously enlarged and converted almost wholly into cysts. Adhesion of left lobe of liver to spleen.

(1st) *Spleen.* Found to be 12 inches long, 9 inches wide and 6 inches deep, made up almost wholly of cysts, which were seven in number, and contained different colored liquids, some clear, others dark, while others were almost wholly pus. The cyst which was tapped was found to contain a large clot of blood.

(2d) *Liver.* These cysts contain different colored fluids, also a number of hydatid vesicles, or daughter cysts. Some of the fluid stained with bile. There are nine cysts on the right lobe and three on the left lobe.

(3d) *Kidneys.* Right normal. Left kidney contracted, and when opened found to be converted into one cyst, containing caseous matter. Heart and lungs normal.

Case 3. Intercondyloid Fracture of Femur; Laceration of Popliteal Artery.

Frank Matush, Hungarian, age 40. While drunk was struck by an engine, and his right leg was squeezed in some manner, although not run over.

Was brought to the hospital at 6 A.M., September 24th, and was found to be in the following condition. Pulse 80. Considerable swelling about right knee. The ligaments seemed to be torn, as the leg could be bent in any direction. Foot and leg cold. No pulsation felt in either tibial arteries.

A diagnosis of laceration of the popliteal artery was made, and the attending surgeon, Dr. McCann was notified. Upon his arrival a further diagnosis of intercondyloid fracture was made. Amputation at the middle third of the thigh was immediately performed. The femoral artery was twisted. The flaps sprinkled with powdered iodoform and united by silver sutures. When turned over to the incoming surgeon, on October 1st, he was doing very well.

Medical Societies.

COLLEGE OF PHYSICIANS, OF PHILADELPHIA.

Autopsy of a Case of Transposition of the Viscera.

BY H. AUGUSTUS WILSON, M.D.

Pathologist to the Presbyterian Hospital and Ophthalmic and Aural Surgeon to St. Mary's Hospital, Philadelphia.

[*Read October* 4, 1882.]

The comparatively rare occurrence of the phenomena an instance of which I am about to relate will be, I think, sufficient excuse for occupying the time of the College. I regret that I am not able to offer a more complete record of the case; but a careful dissection was impossible without taking an unwarranted risk of septic poisoning, as the abdominal cavity was filled with fetid pus.

Frank M., aged 21, died at the Presbyterian Hospital, of purulent peritonitis. I shall ignore in this paper the pathological conditions found at the post-mortem examination, inasmuch as they have no bearing upon the subject under consideration.

The patient had been aware since boyhood that his heart was misplaced, and upon one occasion a physician told him that that was the reason he was left-handed. He had never been very strong; but it does not appear that he ever had any serious affection the cause of which could be assigned to his misplaced viscera.

In 1878, when he first came to the hospital, Dr. James Markoe, under whose care he was, noticed that not only was his heart perceptible in the fifth interspace of the right side, but also by percussion ascertained that this organ occupied the same relative position upon the right side that it should upon the left. He found also that the liver and spleen were transposed, but no further changes seem to have been noticed.

At the time I made the post-mortem examination I found externally nothing to indicate the great changes in the positions of the internal organs, except that the right testicle was suspended at a lower level than the left. When I had opened the thorax and abdomen, and laid bare the organs contained therein, the appearance to me was as though I was looking at the body reflected in a mirror. It was like the photographer's negative.

The heart first attracted my attention, and was found to be normal in every respect, but occupying, as already noted, a position upon the right side. It looked as though it had been pushed over to its present position without changing materially its relations with other organs. The right side was the pulmonary side and the left the systemic side, and in this respect the organ performed its function in a normal manner. The aorta, starting from the left ventricle, followed a somewhat irregular course, crossing over the right bronchus and going from there to the right side of the vertebral column, along which it descended upon the right side. The branches given off from the arch of the aorta were the two coronary arteries, unchanged, the innominate going up

the left side of the neck and giving off the left common carotid and left subclavian, while coming from the right portion of the arch were the right common carotid and right subclavian.

The lungs were reversed. The right lung was found to be smaller, to allow space for the heart. It had two lobes.

The left lung corresponded in appearance to what is commonly the right lung, was shorter than its fellow, being pressed up by the liver, was broader, and had three lobes.

In the abdominal cavity the liver occupied the left hypochondriac and partly the epigastric regions, the large lobe to the left and the smaller ones to the right, the gall-bladder and everything else similarly changed.

The stomach and intestines were transposed. The stomach was partly in the right hypochondrium and partly in the epigastric region. The pylorus extended forward and downward toward the middle of the abdomen. The spleen was on the right side, and attached to the greater curvature of the stomach.

The cæcum was situated in the left iliac fossa, and the colon ascended on the left side and crossed from left to right side of the abdomen. From there it descended and terminated in the sigmoid flexure upon the right side.

As already stated, the man was naturally left-handed. Hyrtl was the first, I believe, to advance the theory that we are normally right-handed because of the more direct flow of blood to the brain upon the left side. And this theory would be substantiated if all cases where the heart and great vessels were transposed were left-handed; but such is not the case. A few years ago a theory was advanced that right-handedness depended upon natural selection. But the easiest explanation is, that from earliest infancy we are instructed to use the right hand always, in preference to the left. When a person with transposition of the viscera is left-handed, we may call it a coincidence. In any other view, it would be extremely difficult to account for the far larger number of persons whose organs are arranged normally and yet are left-handed. In the cases that are noted in the journals, I have not been able to find statistics enough to draw any inferences, for, when this condition is noted, right-handedness appears to be as frequently met with as left-handedness in cases where the viscera are transposed.

Peacock, in his monograph on malformations of the heart (T. Peacock, *Malformations of the Heart*, 2d edit. 1866), says that the most common of all the internal displacements is that in which the heart is placed upon the right side, in a position corresponding to that which it should occupy upon the left, and that this displacement s almost always associated with more or less complete transposition of other viscera. Occasionally the heart is transposed, while the other organs are unchanged (Sur l'Ectopie de l'appareil de la circulation et particulièrement sur celle du cœur.—*Rep. Gen. d'Anat. et de Phys. Pathol.*, t. ii, 1826, p. 1).

Among the earliest recorded cases are those of Servius and Schenkius, in Rome, in 1643 (Thomas Bartholinus, *Hist. Anat. Cent.*, ii, 29. Amstelodami, 1654), and one by Riolan, in 1652 (Allen Thompson, Glasgow *Med. Journ.*, vol. i. 1853, p. 220).

The first case recorded in which the malformation was noticed during life appears to be that described by Morand (Méry, *Memoirs of Academy of Paris for* 1866), in 1666. This case seems to have attracted considerable attention at the time, and was said to have suggested to Molière the transposition of the heart and liver which he puts into the mouth of Sganarelle in his play of *Mèdecin Malgré lui*, published about the time this case was reported.

In cases of more or less complete transposition, the arteries, if they do not retain their natural positions, may be displaced in almost all conceivable ways.

Dr. Gamage (*N. Eng. Journ. Med. and Surg.*, iv. 1815, p. 244) reported a case in which the aorta arose from the right ventricle and the pulmonary arteries from the left ventricle. Mr. Abernethy (*Philosophic, Trans.*, 1793, p. 59) saw a child, ten months old, where the portal veins terminated in the vena cava, the liver being supplied from an unusually large hepatic artery. Mr. Douglas Fox (London *Med. and Phys. Journ.*, vol. li, 1824, p. 474) reported the result of a post-mortem examination in a case where the heart was transposed, and the aorta, after crossing the right bronchus, passed behind the lower end of the trachea, over the vertebral column, and pursued its usual course from there down the left of the spine.

For a very complete account of a case similar to the one I now report, and for an exhaustive study of the histology of such malformations, I will refer to Dr. Allen Thompson's paper in the Glasgow *Medical Journal*.

As regards the practical application of this case, it would be well to bear such abnormality in mind as a possible condition in cases brought to a physician's notice in an unconscious condition. It will readily be seen that considerable difficulty might arise in forming a diagnosis. In surgical operations upon thorax or abdomen it would prove a serious complication, as, for instance, in colotomy, paracentesis abdominis, or pericardii.

Effects of Puerperal Secretions on the Organism.

The *Edinburg Medical Journal* says that Karewsky has made a number of careful inoculation experiments on this subject, with the following results:—

1. All lochia, normal as well as septic, are able to produce septicæmic and ichorhæmic disease in animals. 2. The virulence of the discharge increases with the duration of the puerperium, and during puerperal diseases. 3. When symptoms of septicæmia appeared a spheroidal fungus was found in the organs of all the affected animals. 4. Diseases produced in this way are communicable to healthy animals. The fungus derived undoubtedly from the adjacent air, finds in the genital tract an extremely favorable seat for further development. The inoculated cases differed from each other only in degree. The globular micrococcus found in all the cases is evidently the *materies morbi*, although, of course, it is not a specific "*micrococcus puerperalis*."

Editorial Department.

Periscope.

A New Departure in the Treatment of Rheumatism and Gout.

In the *British Med. Jour.*, Dr. Alexander Harkin presents an article in which he first points out the unsatisfactory state of our knowledge concerning the etiology and therapeutics of these two diseases, and afterwards condemns the now recommended salicylate treatment, and then goes on to recommend an entirely new treatment of his own. He says:—

"My object is not so much to call attention to the epidemic of salicism, from which, apparently, the medical mind is at present suffering, as to propose a new and effective remedy for acute rheumatism, which, in my practice and in that of other professional friends, has afforded results as yet unequaled in the treatment of that disease."

The following case will give a good idea of his method of treatment:—

On October 24th, 1879, I visited sub-constable H., aged 30, married. He had a rigor on the 21st, followed by pain in the left knee and thigh, which were now red and swollen. On the 25th pain had extended to the right knee, both ankles and shoulders. On the 26th the left elbow was also affected; perspiration was acid and profuse; his urine scanty and loaded with urates. On the 27th his state was unchanged. I ordered an opiate at bedtime. He had been previously laid between blankets, and his joints enveloped in cotton-wool. On the 28th he was no better; he had not slept for a week. At 1 P.M. his temperature was 102°, pulse 108. No cardiac affection was perceptible. I then applied a blister, four inches by three, over the region of the heart, to be replaced with cotton-wool at the end of eight hours. On the 29th I found the patient completely relieved. His countenance was cheerful, his tongue clean, thirst diminished, perspiration gone, urine copious and clear, temperature 98°, pulse 90. He told me that he began to feel relief at 6 P.M., just five hours after the application of the blister; that soon afterwards he fell asleep for the first time for many days; and that, having had occasion to rise in the night, he walked unaided across the floor, and only remembered his pains after getting into bed. And thus, although on the previous day paralyzed in every joint, he was now able, without pain, to flex and extend them all, and to sit up in bed with ease. On looking at the joints, every trace of redness had departed, and the swelling was very much diminished, and they could be grasped firmly without pain. On the 29th and 30th he was still improving. Pulse 90, temperature normal. The swelling and pain were absolutely gone from every joint. On November 1st the pulse was 84, temperature normal. Convalescence was complete, and my visits terminated. A week later he walked to my house, a distance of half a mile, and he soon afterwards returned to duty.

He then goes on to say that it is now generally admitted that the exciting cause of acute rheumatism, as of pleuritis or pneumonia, is a chill; and that the effect is produced through the medium of the nervous system; and that, although the integument alone may be directly chilled, the deeply seated internal organs also suffer. The immediate effect of cold upon the nerves of the surface is to lower their functional activity, and to increase the action of the nerves of the internal organ in relation with that part; endocarditis thus becoming the first step in the development of acute rheumatism after exposure to cold. If it be physiologically true that, when two parts of the same body are nervously in sympathy with each other, if we produce a powerful action in the nerves of one, we may withdraw vital energy from the nerves of the other; then it follows that, when a derivative in the form of a blister is applied in the nearest vicinity to the endocardial lining when in an inflamed state, it is but carrying into effect the principle that counter-irritation is the most effective plan available to alter the excited condition of nerve-centres, and so to influence motor, sensory, and trophic nerves. Further, if experience tell me that counter-irritation over the heart is a potent remedy for the cure of acute rheumatism in all its phases, this fact will surely throw light on the nature of that disease. According to Dr. Peter Latham, "the treatment of diseases is in fact a part of their pathology. What they need and what they can bear, the kind and strength of the remedy, and the changes which follow its application, are among the surest tests of their nature and tendency." And Cullen, in the preface to his *Nosology*, page 16, says that "remedies cure diseases only in so far as they remove their proximate causes." When, therefore, a blister over the region of the heart cures endocarditis and its articular complications, it would surely not be unsafe to infer that the proximate cause is located in the heart itself.

If, then, it can be satisfactorily established that acute rheumatism may be cured by a topical remedy alone, what becomes of all the theories based on the idea of its zymotic, its constitutional, or autogenetic origin, and the sundry modes of treatment, and the antidotal remedies devised for the removal of the hypothetical condition of the vital fluid—eliminative, antacid, or otherwise? That it may be done— that it has been done in a number of cases—I have satisfied myself, and knowing how prone human nature is to self-deception, I have guarded against the personal element by inviting the presence and coöperation of several medical men of the highest ability and scientific acquirements as witnesses.

My chief desire is, that my simple plan for the cure of rheumarthritis shall be thoroughly tested

by the profession at large; of its efficacy, my own experience, and that of a number of my professional brethren, assures me. I cannot expect, however, that every one who may be equally convinced by personal trial and experience, shall also accept my explanation of its *rationale*. The pathology and physiology of the nervous system are not yet established on sure grounds; its supposed laws are subject to many contradictions, which only a more extensive knowledge of its principles, and their application, can elucidate. Nor would I wish to appear as proclaiming its efficacy in every case. I am satisfied, indeed, that endocarditis will still claim a place in the sad category of fatal diseases; but I also feel that, in cases possible of cure, the abortive plan proposed must claim precedence as the most rapid, safe, and permanent: from its very nature, the most potent to anticipate or remedy functional or organic disorder in the heart and its appendages. One other important result is likely to flow from its general adoption, viz., the reduction to very moderate dimensions of that class of applicants to whom the physician has so often reluctantly to refuse the benefits of life insurance, on account of the existence of permanent cardiac injury, caused by undetected lesion in cases of ordinary acute rheumatism.

Testes in Perineo.

The *Lancet* says that Dr. S. Baudry has recently met with a case of the rare malformation in which the testicle, instead of descending into the scrotum, passes down into the perineum. The subject of the deformity was a new-born child, in other particulars well developed and well nourished. The right testicle was found two centimeters in front of the anus, and the same distance outside the ano-scrotal raphe; it presented normal characters, being slightly smaller than the one on the opposite side; the vas deferens was readily traceable up to the external abdominal ring. This testicle was covered by normal skin. The right half of the scrotum appeared to be absent; the raphe was seen on the right side, and from it the skin continued, without fold or line of demarcation, to the thigh. No sign of any dartos could be found to the right of the raphe, for while cold caused distinct contraction on the left side none was observable on the right. The displaced testicle was not movable. In this the case differs from others that have been recorded, for in the accounts of such cases it is usually stated that the testicle was readily moved up into the groin, and in some it always assumed this position in sitting and walking, and all the treatment required has been to fit on some form of suspensory bandage to keep it up in the groin. Hunter was the first to draw attention to this rare deformity of the testicle, and the difficulty he experienced in accounting for it has, in the opinion of pathologists, not yet been satisfactorily overcome. Mr. Curling, who reports more cases than any other observer, attributes it to the action of a gubernaculum testis, of which the middle slip is attached to the perineum instead of to the bottom of the scrotum; and there is certainly much to be said for this view, the strongest piece of evidence in its favor being the fact that in a case in which Mr. Curling attempted to replace the organ he found a very firm band attaching its lower end to the superficial structures of the perineum. On the other hand, some authorities doubt whether the gubernaculum testis is the cause of the descent of the testis, and whether, therefore, its faulty attachment can lead to a misplaced testicle. In only a minority of the recorded cases has the corresponding side of the scrotum been absent, so that we cannot attribute the deformity to want of development of the normal receiving pouch. More frequently the scrotum is shrunken, and in two cases Mr. Curling and Mr. James Adams attempted to replace the testicle in its proper scrotal pouch. Mr. Hutchison has seen a boy with both testicles in the perineum. Vidal observed it in two brothers. It is well known that testicles retained in the abdomen usually fail to secrete spermatozoa. Such appears not to be the case when the organ reaches the perineum: in one case Ledwich dissected a specimen, and although the organ was small and soft, its ducts were found to contain spermatozoa. The most important question is that of the proper treatment. There is no evidence to show that the testicle is, in these cases, specially prone to become the seat of malignant disease, nor associated with hernial protrusion. When it is movable a retentive apparatus, which keeps it out of the way of injurious pressure during sitting, riding and walking, answers all the indications. In such a case as Dr. Baudry's, where the organ is fixed, it would be wise to wait to see whether it may not become mobile, but should this not occur it would undoubtedly require excision, as it would be constantly exposed to injury in sitting or riding. A case is recorded in which a perineal testicle became affected with gonorrhœal inflammation, and was almost incised, in error for an abscess. Zeiss mentions the curious coincidence of this deformity in a boy suffering from stone in the bladder, and the misplaced testicle—the left—was only discovered when he was about to commence the operation of lithotomy. Its position was such that he was forced to cut on the right side.

The Inter-Convertibility of Zymotic Diseases.

In the course of an address delivered before the late meeting of the Canada Med. Ass., by the eminent physiologist, Dr. W. B. Carpenter (*Canada Lancet*), he said: "Sir John Pringle gave further the results of some observations which he (Dr. Carpenter) had always held to be of fundamental value, namely, the principle of the convertibility of certain forms of zymotic diseases to other forms, diseases which they were accustomed to regard as of a different type. At the conclusion of the rebellion of 1745, in Scotland, the troops were shipped off in little brigs. Some of the men were suffering under the mild autumnal fever. The brigs knocked about for six weeks, during which the men were enclosed under hatches, without ventilation. In consequence of the unsanitary conditions, the fever changed, by the process referred to, into a

malignant typhus. They landed and the disease spread among the villages in which the men located. Another instance had come under his observation, of the malarious fever of the west coast of Africa changing, under similar conditions, into yellow fever of a contagious character.

Dr. McWilliam and others had reported similar cases of the same convertibility of these kinds of fever. He also referred to Sir Robert Christison's opinion in favor of the convertibility of zymotic diseases, and that typhus and typhoid could not always be distinguished, and said that Sydenham, one of the best observers, did not distinguish between scarlatina and measles. He also quoted Pasteur's opinion to the effect that the medium in which the germs were developed would have a most important effect on the germs themselves; that when germs which would produce ordinary malarious fever developed themselves in blood which was rendered unhealthy by bad ventilation or other causes, these germs would develop themselves in quite a different form, producing a different type of disease.

The smallpox epidemic which swept over Europe and America in 1871 was of a most singular character, and called attention to a type of smallpox which had not been epidemic since the beginning of the last century. He believed that the revival of the severe form in 1871 was due to the crowding together of the French army in Paris, and of the French prisoners taken by the Germans, and that the malignant type was thus developed out of the milder form. The lesson they had to learn from all this was to insist upon vaccination. Good vaccination might be said to be an almost perfect preventive. Another fact which the older practitioners recognized was, that the quality of the vaccination had deteriorated during late years, and the only remedy for this was to obtain the vaccine fresh from the animal.

Removal of Part of Appendix Vermiformis from a Hernial Sac.

Dr. C. R. Thompson reports the following case in the *British Medical Journal*:—

T. T., aged 57, a pork butcher, accustomed to heavy lifting, a well nourished and healthy man, had suffered for about twenty years from right inguinal rupture, for which he had worn a truss. On the morning of July 20th, he put on his truss as usual, but, on coming down, found himself in great pain, so that he took off the truss, and immediately a large swelling appeared at the seat of rupture, with pain so acute that he lay down, writhing, on the floor. He went to bed again, applied hot fomentations, and in the evening, feeling no better, sent for me. I found the right side of the scrotum occupied by a hard mass, oblong, having the appearance of a large inguinal hernia, very hard and firm, but elastic to the touch; no gurgling or movement in it; no impulse on coughing. Pressure and handling the tumor gave him pain; and the right iliac region was tender and painful. He had not vomited, and some castor-oil taken in the morning had acted freely during the day. Tongue furred; skin cool; pulse 72. He told me that the hernia had often come down on exertion, with the truss on; but that, until this morning, he had always found it soft, gurgling under the fingers, and easily reduced. I ordered him to continue the fomentation, which comforted him; to take half a grain of extract of belladonna every two hours, with milk and soda-water as nourishment. On July 21st, the night had been restless, with much pain in the right iliac region and in the swelling, which was unchanged, except in being more tender on pressure, and with more œdema of the scrotum. The bowels had acted at 3 A.M.; he had no vomiting; the pulse and skin were natural. The same treatment was continued. On July 22d, the night had been bad, with more pain and tenderness in the parts, and a distressed expression of face. There was no vomiting, and no further action of the bowels since 3 A.M. yesterday. The pulse and skin were natural. At 11 A.M. my brother saw the case with me, and we decided to cut down on the hernia; as, although there was an absence of vomiting, and, perhaps, of obstruction, there was evidently a strangulated mass, and commencing peritonitis. Under chloroform I dissected down to the sac, and, on opening it, a little turbid, pink, serous fluid escaped, of slightly feculent odor. The sac was occupied by a hard, solid substance, of about the size of two large fingers, of bright red color, and irregular, nodulated outline; it looked somewhat like three or four cock's combs strung together, the irregularities being partly covered by a thin layer of recent lymph. There was no bowel in the sac, and the fingers could be passed through the ring without difficulty. Thinking that it was probably a mass of diseased omentum, I cut away as much as could be easily protruded through the wound, the section being through a solid substance, like a fibrous tumor. The part removed was about two and a quarter inches long. The wound was brought together with sutures, and covered with a lint compress. The cut surface of the substance removed showed the orifice of a tube, about the size of a goose-quill, imbedded in a hard, dense growth. The corresponding orifice of the upper part of this tube, similarly imbedded, was visible in the wound. On passing a director down the duct, in the part removed, and slitting it open, I had no doubt that it was the appendix cæci, this being made more certain by finding at its extremity, buried in the mass, a small, sharp, rough piece of bone, which had probably been involved in the duct and caused the inflammatory diseased growth. The man recovered without a bad symptom.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The very important studies of Drs. Oscar Loew and Thomas Bokorny, of Munich, on the chemical conditions of life, have met with such attention that they have published a second and much enlarged edition of their essay, this time

with the title *Die Chemische Kraftquelle in Lebenden Protoplasma.* As we have previously explained, their theory is that the force of life lies in the energy of the aldehyde group, and that simple alterations in the organic conditions of protoplasm are sufficient to explain what was once called the *vis vitalis.* Their observations are ingenuous and interesting.

——Dr. C. L. Dana, in an interesting brochure, discusses "The Digestive Power of Commercial Pepsin in Artificial Digesters and in the Stomach." His conclusion there is this :—

A physician in giving a dose of *good* pepsin may believe that it will have a value two or three times greater than that exhibited under ordinary artificial conditions, *i. e.*, it will digest twenty or thirty times its own weight. This conclusion is in harmony with much clinical experience, that *good* pepsin has a *real* though not a *great* medicinal value.

Points of practical importance are, that large doses should be given, even of so-called pure pepsins. The physicians should always know how much pure pepsin there is in the saccharated preparations. Acid should generally be given immediately before, and the pepsin after meals.

——Anything that Dr. J. M. DaCosta writes on tubercle deserves the most attentive consideration, for there is probably no member of the American profession who has given this subject more conscientious study, and certainly there is none who feels more deeply the importance of presenting to the public only well matured opinions. We would recommend, therefore, a careful perusal of his pamphlet, entitled "Some Points in the Pathology of Tubercle (copies, we presume, may be had from Collins, printer, 705 Jayne St., Phila.). It is chiefly concerned with the relation of caseous pneumonia to tubercle.

BOOK NOTICES.

Index Catalogue of the Library of the Surgeon General's Office, U. S. A. Vol. III.

This very valuable work is progressing as rapidly as the appropriations permit. Every one who is interested in medical literature, or in the study of any branch of medical science, cannot but wish that the means were at hand to finish it completely and promptly. Its numerous references will save years of labor to the earnest student, and offer a ready means to ascertain what has already been done by previous workers in science.

The present volume extends from the word *Cholecyanin* to *Dzondi*, so that it is evident, in spite of its 1020 large, double-column quarto pages, that we have long yet to wait before we can see the work completed, even under the most favorable auspices.

The more closely we examine the way the work upon it has been done, the more are we impressed with its thoroughness and accuracy. It is really a miracle of painstaking, literary and typographical completeness.

A System of Surgery ; Pathological, Diagnostic, Therapeutic and Operative. By Samuel D. Gross, M.D., LL.D., D.C.L., etc. Sixth edition, thoroughly revised and greatly improved. 2 vols., pp. 1194, 1174 ; half Russia. Henry C. Lea's Son & Co., Philadelphia. 1882.

This work is really an extraordinary monument of learning and industry, especially when we consider that it is substantially the labor of one man. We do not hesitate to venture the prediction that it is the last complete system of surgery, based on the studies and observation of one individual, that the world will ever see. From this time forward, such is the rapid extension of that science, no one man will be able to grasp it in its entirety, and speak of all of its branches from personal knowledge. Humboldt predicted that no one could ever again attempt the writing of such a work as the *Kosmos*, and already his prediction is recognized as true by all naturalists. Coöperative labor must in future take the place of personal encyclopædic knowledge. We regard Gross' system of surgery, therefore, not only as a singularly rich storehouse of scientific information, but as marking an epoch in the literary history of surgery.

With regard to this present edition, it has received the most careful revision by the eminent author himself, assisted in various instances by able specialists in various branches. All departments of the vast and ever increasing literature of the science have been drawn upon for their most recent expressions. The illustrations are over 1600 in number, about 600 of which have been prepared especially for these volumes. The late advances in surgical practice have been carefully noted, such as the recent developments of Listerism and the improvements in gynecological operations. The novelties in pathology are recorded, and full justice is awarded to the labors of the numerous energetic younger workers in the various specialties of surgery.

The publishers have done their part in the most satisfactory manner. The paper and printing are beyond criticism, and the two volumes can be had, bound in half Russia, in the most durable and handsome style. In every respect the work reflects lasting credit on American medical literature.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D.,
JOSEPH F. EDWARDS, M.D., } EDITORS.

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POST-GRADUATE INSTRUCTION IN PHILADELPHIA.

Our respected contemporary, the New York *Medical Record*, has surprised some of us who dwell in Philadelphia by publishing a recent editorial, claiming that "It is eminently fitting that New York, the acknowledged medical centre of the country should be the chosen field for taking the *initiative* of the post-graduate movement." We would draw the attention of the writer of the article above quoted to the fact that for more than a year an advertisement of the Post-graduate Course in the University of Pennsylvania has appeared in the columns of the same journal, and in other medical periodicals in the United States. Philadelphia shelters the oldest and most widely known medical college in the country, and has produced a corps of writers whose works have become standard in medical literature; moreover, its hospital, and dispensary facilities are unrivaled. When the proposition was made to organize a post-graduate course, it was designed to benefit physicians who had been for many years coming to Philadelphia to pursue special courses of study under the care of physicians of repute in special branches of medicine. Few changes have been introduced in the character of the instruction. The scope of teaching has been enlarged by arranging individual workers into classes. The advantages given in the present post-graduate courses are the conservation of the practitioner's time by a well planned schedule and by the nucleation of several distinct lines of study under a reduced fee, offered as an inducement to both practitioner and instructor. At the same time, no practical detail is omitted which has made the previous isolated post-graduate courses so popular. Experience has shown that one of the most obvious necessities to perfect post-graduate instruction is a limitation in the number of attendants upon each class, and this has been fully appreciated, at least in the post-graduate courses in the University of Pennsylvania.

The pivotal point must always be to subordinate didactic instruction, so that it shall merely fill in the gaps in a full clinical course. The real needs of the practitioner are met by placing before him the cases of disease and the instruments for treatment and diagnosis, under the superintendence of competent instructors. The heart murmur, the fracture crepitus, the use of instruments of daily service in gynecology, are all taught by the personal examination of patients, while, in addition, the public, general, "old-fashioned" clinics, are still available.

Ward class instruction of under graduates in some medical colleges consists in the training of students in small groups, in the observation of disease and in the use of instruments of precision in diagnosis and treatment. By this measure, early practiced in Philadelphia, an impulse has originated which was recognized in the homes of students everywhere. Few men can practice medicine actively five or more years without gaining a knowledge of their shortcomings. These are almost entirely in the direction of the clinical study of disease in its wider and more comprehensive sense. Many of the

associates of our recent graduates will find the insight more and more painful by contrast, and a desperate effort will be made by many physicians in our great country to seek the medical centres for a review of old truths and the acquisition of fresh knowledge.

We may further add, not as a matter of boasting, but as a fact in the medical history of this country, that the first advocacy of the establishment of a post-graduate course in the United States, was in the editorial columns of the MEDICAL AND SURGICAL REPORTER.

It is perhaps a little too much the habit of our New York friends to be, or to profess to be, in very complete ignorance of the fact that they are by no means always leaders in matters of intellectual progress. When the facts are against them they go on the principle, "so much the worse for the facts."

THE FEES IN THE PRESIDENT'S CASE.

The public is at present being treated to a discussion about the fees of physicians and surgeons in connection with those handed in by the attendants on President Garfield. More than one of these has felt it incumbent on him to present the matter to the public in statements in the daily papers.

The amount of the fees indicate how wide is the range placed upon the value of their services by different professional men. One of them asks just double the amount of another, who furnished equal services and is not less competent in all respects. Another puts his claim—with characteristic modesty—not in figures, but relatively, by saying that he is entitled to twice the fee of any other medical man in attendance.

It is obvious, from the amount of money placed at the disposal of the committee, that Congress did not contemplate paying claims of any such magnitude as have been put in. Probably the public also are of this way of thinking. They certainly are, if we may judge by the comments of the press. These are, generally, to the effect that the bills for professional services are, in the aggregate and in certain items, excessive, if not extortionate.

Certainly there has never been, in the history of the country, any case, either in public or private life, where anything like such an amount has been claimed by the medical attendants, and to say the least, it does appear in an unfortunate light that the national disgrace of such an assassination should be followed by an unpleasant appearance of professional grasping. It would have been much more dignified for the whole question of professional remuneration to have been left to some of the eminently respectable and judicious medical bodies in this country to determine.

Speaking in a general way, the basis on which such a body would found its decision would be the average value of the physician's time, as shown by his annual income. In the case in question there were no serious operations performed, and nothing was done that tasked the skill or knowledge of the attendants. It was a case of gunshot wound, which ran an ordinary course, and was not interfered with. The unusual responsibilities and anxieties on account of the distinguished rank of the patient, about which considerable has been said, did not fall heavily on any single individual, as they were only too eagerly sought after and divided up. Moreover, practically speaking, they were more than compensated for by the eclat which the fact of being called in attendance reflected on the reputation of those whose advice was asked.

It is unfair, however, to bring into the estimate, as some newspapers have done, the fact that all these attentions did not save the patient; nay, that it has been publicly asserted by leading surgeons in this and other countries that grave errors of diagnosis and treatment were committed; because, as we have heretofore said, such statements cannot be proved, and if proved, no surgeon pretends to constant success or infallibility. If there were such errors, they were honest ones. The total amount of the fees claimed by the physicians is $85,000, or, including the relative claim $110,000—considerably more than $1000 a day. In spite of our desire to support the profession in its just rights, we acknowledge that this staggers us.

THE SIGNIFICANCE OF ALBUMINURIA.

In this issue we present an unusually interesting lecture by M. Dreyfus-Brisac, on albuminuria.

Of all questions now before the medical profession, none possess more practical interest than that of the etiology and significance of albuminuria. It is but a short time since the presence of albumen in the urine was regarded as a very conclusive indication of organic disease of the kidney.

We now know that it may occur where the kidneys are perfectly sound, while, on the other hand, the most serious pathological derangement of these organs may exist, while not even a trace of albumen can be found in the urine.

Thus has one of our strongest diagnostic points (as we supposed) in Bright's disease been toppled from its supremacy, and relegated to the position of a collateral symptom that may or may not be present, and to which we now attach very little importance.

What, then, is the significance of albuminuria? That is just the question that the scientific minds in the profession are now endeavoring to determine, and it is to this end that we desire to direct the clinical thought of our readers.

If the theory of Semmola be true, if albuminuria is the result of such changes in the albumen of the blood, as to render it unfit for assimilation, then it must be *excreted*.

If, further, this excretion causes irritation, with subsequent inflammation and degeneration of the kidneys, then have we a clue, a vantage ground, from which to push onward, in our researches into the therapeutics of Bright's Disease.

For if this abnormal albumen is the direct cause of the disease, then it would logically follow that, by preventing this change, or at once remedying it when it has taken place, we would necessarily remove the cause.

But this theory has not been universally accepted.

It is not incompatible with the mechanical theory, since the two conditions could readily be present at the same time.

What we want is additional research, to establish or dismiss this very plausible and acceptable theory. If established on a foundation of facts, then we must determine the nature of the alteration of the blood albumen, and when this is done, devise some means to prevent or remedy it. While carrying on such observations, a point of great practical value would be, to endeavor to ascertain what symptoms would make known this abnormal condition of the blood albumen in its incipiency, before it had commenced its deadly work on the kidneys. With such a combination of knowledge we would be enabled to direct the ounce of prevention for Bright's Disease, with almost unerring certainty.

There can be no question but that Bright's Disease is considerably on the increase in this country, and since it is very rarely (comparatively speaking) noted among those who live in every way a *natural* life, therefore does this one fact lend practical force to any theory of causation based upon derangement of the nutritive processes.

This terrible disease annually destroys *prematurely* so many *valuable* lives, deaths that leave an almost irreparable void, that to any one who can carry out successfully such scientific investigations as we have hinted at, the whole world will owe an eternal debt of gratitude.

DOCTOR OF MEDICINE, UNITED STATES OF AMERICA.

From the *British Medical Journal*, we learn that a Mr. Hubert Baynes Scott, was recently summoned before the Coroner at Deptford, and interrogated on a charge of malpraetice preferred against his assistant, who was unqualified.

When asked, what is your qualifications? Mr. Scott answered, I am L. S. A.

The Coroner then asked him, "d› you, therefore, consider yourself entitled to put M.D. on your card?" To which he replied, "I am a Doctor of Medicine, United States of America." We relate this case, because we wish to say to the profession of England that we have no such title in this country as that mentioned.

If the party in question desired to convey the idea that he had received a diploma from some University in the United States, he should have been more explicit. The general title he uses has no existence whatsoever in this country.

Notes and Comments.

Lawn Tennis Arm.

In connection with the "Rider's Sprain," to which we have had occasion to refer, the following case, recorded in the *Lancet*, by Dr. C. Sutcliffe, will possess interest:—

Mr. G. W., last winter, during a very hard-fought game of racquets, suddenly, after a back-handed stroke, felt severe pain over the pronator radii teres, which incapacitated him from taking further interest in the game, because, as he described it, he could not hit a single ball. There were swelling and tenderness on pressure along the course of the pronator. Cold water bandages, and subsequently soap liniment, gave relief. He can now play cricket and bat half a day without the slightest inconvenience, but if he plays lawn tennis for an hour, the muscle gets so painful and stiff that he can scarcely use his arm. As in the former there is no back-stroke, it proves pretty conclusively that the back-stroke is the cause of the injury.

It is well that we should study the various forms of accident to which our sports and pastimes may give rise.

Treatment of Athrepsia.

M. Parrot, of the Paris Faculty, has applied the designation athrepsia to a state of general constitutional debility in young infants, which, in its gravest forms has a duration of but ten or twelve days in the acute state, and of fifteen or thirty in the chronic.

The first great rule of treatment in this condition is simple: Suppress every form of alimentation except the breast milk. This is the principal point, and if the nurse is not good, an immediate change must be effected; an athrepsic child deprived of breast milk will inevitably die. Pharmaceutical treatment is of much less importance.

Against the diarrhœa and colic so common among infants, the following potion may be given by teaspoonfuls:—

℞.	Bismuth subnit.,	ʒ ss	
	Syr. simplicis,	ʒ j	
	Aquæ calcis,	ʒ j.	M.

This potion may be freely used each time the infant is put to the breast, and the dose doubled if it be four or five months old. When the tongue is much furred a mild emetic of syrup of ipecac is of great service. Castor oil is the best purgative at this period of life.

Against protracted vomiting, M. Parrot administers cold drinks, iced milk with the addition of half an ounce of brandy or rum to the nursing bottle of milk.

The brandy may be replaced by elixir of pepsin. While cold drinks are administered, the infant should be kept very warm; he may be placed in a mustard bath and well rubbed, then laid between warm blankets. If any aphthæ appear, either of the following lotions may be applied:—

℞	Sodæ borat.,	ʒ iss	
	Mel. rosæ,	ʒ ss.	M. Bene.

℞.	Potass. chlorat.,	ʒ iss	
	Glycerinæ,	ʒ ss	
	Mel. rosæ,	ʒ ss.	M.

Nerve Stretching.

The following interesting cases are described by Dr. Doutrelepout, in the *Cbl. f. Klin. Med.*, 1882, No. iv, as a contribution to nerve stretching in spinal diseases:—

In a man, aet. 31, suffering from chronic myelitis (paraplegia and anæsthesia of the lower limbs, loss of patellar-reflexes, disturbances in micturition, etc.), D. stretched, in four different operations (on account of a valvular lesion, only local anæsthesia was made use of), both sciatic nerves and crural nerves, within a period of five weeks. The difficulty in urinating ceased, also the annoying sensation of a girdle around the abdomen; sensation became normal, motion returned in the legs, though the patient had still to use crutches, threw his legs forward, and still trembled.

In a case of tabes, after four years' existence, after stretching of the four large nerves of the legs, the ataxia, the girdle sensation and, in the beginning, also the pains, improved; later, however, the pains returned, but with less intensity. In a second case of locomotor ataxia, which had lasted over two years and a half, after stretching of both crural nerves, the ataxia became less and the pains ceased totally.

From all the reports of nerve stretching in spinal diseases so far published, we come to the conclusion that no case of lesion of the spinal cord should be given up as unamenable to treatment, without first nerve-stretching, and if neces-

sary, of both sciatic and crural nerves, having been tried, but under antiseptic precautions. There is almost no case on record where some of the symptoms had not improved, for a short time, at least.

Morphia Poisoning.

In the *Lancet* Dr. Philip E. Hill reports the case of a man suffering from mitral disease, to whom he gave a hypodermic injection of ½ of a grain of morphia, to relieve severe abdominal pains, for which chloral and bromide of potassium had been useless. The man immediately went into a sound sleep, and when again seen (five hours later), was comatose; eyelids open, pupils contracted to a pin point and insensible to light, extremities cold and surface of body clammy; respiration slow and stertorous, but pulse unaffected. The usual remedies for morphia poisoning succeeded in restoring consciousness, and the next day all bad symptoms had disappeared. The question arises, why such a small dose should have produced such grave symptoms. Dr. Hill was sure of the strength of the solution used, and plenty of time had elapsed for the elimination of the chloral.

Cutaneous Injections.

Under this title Dr. Walter Scott makes a very sensible and practical contribution to the *Lancet*. He suggests the experimenting with injections, to endeavor to produce a condition of the blood unfavorable to the development of disease-carrying bacteria. We have all heard that the injection of a solution of permanganate of potash into a vein, immediately after the introduction into the system of the rapidly fatal cobra poison, prevents that poison from having its usual fatal consequences, and doubtless it would have the same result if injected immediately before the bite of the cobra. Again, Dr. Fontaine, Bar-sur Seine, has had the most remarkable success in his treatment of diphtheria, by giving his patients sulphide of calcium until the breath and skin exhale the odor of sulphuretted hydrogen. And even if the experiments on animals, such as I suggest, should fail to discover an antidote or germicide powerful enough to counteract the poisonous effects of the micro-organisms, which in a concentrated form are injected under an animal's skin, it might still be possible for those of our surgeons who have a large and sad experience of blood-poisoning, or for those practitioners who have numerous cases of zymotic diseases constantly under their charge, to move in the track of those gentlemen who have been successful in combating the deadly cobra poison, and the too often fatal diphtheria.

There are several antiseptics besides permanganate of potash with which the blood might be saturated, either by injection into a vein, or by small and frequently repeated doses, for example, eucalyptus, sanitas, the sulphides, the carbolates, the salicylates, etc.

Blood Diet.

As the result of five years' experience at the Royal Hospital for Children and Women, Dr. Ed. O. Day gives, in the *Lancet*, the following mode of preparing blood as a diet for delicate children:—

A given quantity of blood is collected, and before coagulation takes place, is mixed with three parts of water, and kept in constant movement for some time, then gradually evaporated over a water bath, at a temperature not exceeding 100° F. Very great care has to be taken to prevent coagulation. When the consistence of chocolate is reached, a higher temperature may be used, to perfect drying. It should be reduced to a powder in a mortar. It is like coffee, with very little taste, but with a peculiar odor. If properly prepared it should be perfectly soluble in water. He commences, for a child one year old, with a teaspoonful during the day.

Palpitation of the Heart.

The *British Medical Journal* says:—"In the Appendix to the British Army Medical Department Report, Dr. Veale has given a summary of the ascertained or most probable causes of palpitation in the cases he has examined. Of these, malarial fever ranks highest, followed by intemperance, heat of climate, marching on active service, exertion generally, excessive smoking, hardships on active service, and several minor causes. He does not consider that the pressure of the valise or of the belts now occupies a prominent place, as it formerly did, although it may still contribute. He speaks very decidedly of the injurious effect of excessive smoking, although he hardly assigns to it as high a place among the causes as we should be inclined to give it, especially when combined with drinking. But it is a cause which it would be extremely difficult to abate, though probably something might be done in the way of issuing less "villainous stuff" to the soldiers than they are in the habit of smoking. "The soldier loves his pipe, and its value as a 'carebreaker' may

be, and I dare say is, very great; much caution would therefore be needed in any attempt to curtail this luxury, but in the meantime it would certainly be good economy on the part of Government to insist that such a deleterious substance as the 'twist' or 'stick' tobacco should never be sold in canteens, or issued to the troops on board ship, or in the field." If any one doubts the injurious influence of this tobacco on the heart's action, we recommend him to test it by taking the sphygmograph tracings of even an habitual smoker, before and after indulging in a pipe of it."

The Employment of Blisters on Children.

The *Medical Times and Gazette* quotes from a lecture on this subject, by Dr. Archambault, delivered at the Hôpital des Enfants Malades, which concludes with the following advice:—"If I am still in doubt regarding the good effects which I have believed might be attributed to blisters under some rare circumstances, my conviction is absolutely final as to their mischievous influence in a great number of cases; and, in a more concise manner, I may say that I am not sure that I have ever seen them do any good, but that I am very certain that they have often done a great deal of harm. Never apply them, then, in children, unless they are positively indicated, and especially take every precaution to prevent the accidents to which they may give rise."

A Proposed Modification of Esmarch's Method.

The London *Medical Record* says that Szydlowsky proposes a modification of Professor Esmarch's method of obtaining artificial bloodlessness, which consists in preparing a piece of India-rubber tubing, much after the fashion of the rings which are placed round horses' fetlocks to prevent galling, and rolling this ring up the extremity from the periphery, driving the blood backward, and then leaving the ring *in situ*, with the intervention of a wad of lint to act as a compress over the artery at some point opposite a bony prominence. The advantages he claims for this method are: greater rapidity of application; its cheapness compared to the real Esmarch's bandage; lighter weight, therefore greater transportability in the field (see Esmarch's article on the elastic girth as a tourniquet, and others of minor importance). [The method described by M. Szydlowsky is that which is adopted in Australia when producing artificial bloodlessness for operations, the impression there being that this was Esmarch's original method. The process was explained to the reporter 2½ years ago, by a young Australian medical man, who came to the British Isles for study, and wondered that Britain was so far behind as not to know the proper mode of applying Esmarch's apparatus.]

Important for Smokers.

In the chemical laboratory of the Board of Health, in Bremen, Dr. Kissling (*Deutsche Medizinal Zeit.*, Aug. 7, '82) has made investigations in regard to the danger of smoking cigars. It would lead us too far, were we to publish his careful experiments and analyses in detail, but we will give our readers the results of the same.

As grave poisons he found carbonoxyd, sulphuretted hydrogen, prussic acid, picrolin bases and nicotin. The first three cannot come into consideration, as they are too volatile, and present in too small quantities. Regarding the nicotin, however, he found that a very small trace only is burned up by the smoke, but that the stump becomes the richer in this narcotic substance, the larger the cigar is, the more the end is chewed, the shorter the stump gets, and the oftener the cigar is lit. Conclusion: to avoid all danger, smoke a cigar not too thick and long, don't chew the end, smoke only two-thirds of every cigar, and throw it away as soon as relighting becomes necessary. Never smoke a cigar after it has once gone out. *Cigarettes are the least injurious* of all tobacco smoking.

The Education of the Young.

The *Lancet* says that M. Duvaux, Minister of Instruction in France, has addressed a circular to the directors of lyceums upon this subject. In it the system hitherto for the most part in vogue, of cramming the memory with dates and dry facts, is deprecated, while the professors are enjoined to devise methods which shall be calculated to draw forth the intelligence of the learners and foster their thinking powers.

Tendon and Other Reflexes.

The *Medical Times and Gazette* says that A. Eulenberg has made some observations in 124 children, varying in age from one month to five years: They were all healthy. The knee phenomenon was not obtained in 7 cases on either side, and in 3 on one side. The foot phenomenon failed, or was very indistinct, in 101 cases. The reflex from the tibia and radius

was wanting 108 and 109 times respectively. The abdominal, nasal, corneal, and pupillary reflexes were, on the contrary, always present. The auricular reflex was not clearly got 5 times. Out of 78 boys, 20 did not exhibit the cremasteric reflex. The period of latent stimulation of the foot phenomenon (Achilles tendon reflex) was found to be about one sixty-second part of a second longer than for the knee phenomenon.

Mixed Chloroform—Morphia Narcosis.

This method, as practiced by Prof. Thiersch, in Leipsic, succeeds frequently, without producing unconsciousness, in causing a perfect analgesia, during which Thiersch had made grave and prolonged operations.

To be certain of this narcosis, drunkards receive one-half to one grain morphia; men one-half of a grain; women one-quarter of a grain, and children one-twelfth to one-eighth of a grain. From 5 to 7 minutes after the hypodermic injection the patients are very lightly chloroformed, till near the stage of excitement; the operation is performed; as soon as pain is felt, a little chloroform is added. In this manner not the tenth part of chloroform is needed, the operation just as painless as under full chloroform narcosis, and there is no risk or danger incurred.

Mycotic Disease of the Kidneys.

In No. iv, of the *Ztschr f. Klin. Med.* p.,191, Dr. M. Litten reports two very interesting cases of mycotic affection of the kidneys. Two persons living together in one house became suddenly affected with rigors, great increase of temperature and albuminuria of a high degree. Under uræmic symptoms both died. Toward the end perfect anæmia was present. At the post-mortem the kidneys were found filled with bacteria. Both patients had been drinking water from a well which existed near a graveyard. The water was found full of bacteria. Similar cases have been reported this year by Bamberger and Aufrecht.

Nature's Removal of a Tumor.

A peasant woman, æt. 45, mother of three children, the youngest six years old, suffered for about a year from a hard, uneven tumor of the right mamma. The tumor had grown tightly to the skin, and in one place it showed softening and some fluctuation. The general nutrition had begun to suffer also. Dr. J. Stein (*Wratsch*, 16, 1882, a Russian paper) diagnosticated cancer, and proposed amputation of the breast. In the meantime he ordered subcutaneous injections of pyrophosphate of iron, with citrate of sodium ($\frac{1}{6}$), and administered one such hypodermic in her back. Two days later erysipelas migrans developed itself, and when this disappeared, twelve days later, only two little swellings of the size of a walnut were all that remained of the tumor, and at the same time the general health and nutrition of the patient improved directly.

Eccentricity and Idiosyncrasy.

Dr. William A. Hammond contributes a very practical article on this subject, to the New York *Medical Journal and Obstetric Review*. It is interesting and valuable as directing more thought toward the clinical value of carefully noting idiosyncrasies than has been hitherto the rule. He concludes that the idiosyncrasies of individuals are not matters for ridicule, however absurd they may appear to be. On the contrary, they deserve, and should receive, the careful consideration of the physician, for much is to be learned from them, both in preventing and in treating diseases. In psychiatrical medicine they are especially to be inquired for. It is not safe to disregard them, as they may influence materially the character of mental derangement, and may be brought in as efficient agents in the treatment.

Actions of Pepsin.

The London *Med. Record* reports the case of an old man of 80, who suffered from retention of urine, from the presence of coagulated albuminoid masses in the bladder. An injection of about sixteen grains of crystallized pepsin led, in a few hours, to a dissolving of the masses and relief.

Several observers have reported benefit from an acidulated concentrated solution of pepsin in diphtheria:—

℞.	Pepsin cryst.,	℥j	
	Acid. muriat. dil.,	gtt. xx	
	Aquæ,	℥j.	M.

Apply copiously every hour, with a throat mop.

The crystallized pepsin used is prepared by Dr. Carl L. Jensen, of this city, and we can add our testimony to its activity in this form.

Trichinæ in Adipose Tissue.

Contrary to the commonly accepted idea, that trichinæ inhabit only muscular tissue, the *Lancet* says that Chatin has found them in adipose tissue. That he did not mistake them, is evi-

denced by the coexistence of the same parasite in the muscular tissue of the same subject. Experiments proved that animals fed with trichinous fat exhibited no indications of trichinosis, while others fed with the flesh from the same infected animal quickly suffered and died with symptoms of intestinal trichinosis; although further observations on the comparative innocuity of the fat must be made before the fact can be regarded as of hygienic importance. The practical value of the discovery at present seems to be that the fat, as well as the flesh, of suspected animals should be examined.

Imperfectly Developed Child.

At a recent meeting of the New York Med. and Surg. Soc. (New York *Med. Journ. and Obstetrical Rev.*), Dr. S. O. Vanderpoel mentioned a case which he had seen. The fingers grew directly from the shoulders, and there was no scapula. The legs and feet were rudimentary. The child, a female, was living and healthy.

The Soy Bean.

The *British Medical Journal* says that Prof. E. Kinch, writing in the *Agricultural Students' Gazette*, says that the Soy Bean approaches more nearly to animal food than any other known vegetable production, being singularly rich in fat and in albuminoids. It is largely used as an article of food in China and Japan. Efforts have been made to acclimatize it in various parts of the Continent of Europe, and fair success has been achieved in Italy and France; many foods are made from it and its straw is a useful fodder.

A New Use For Salicylate of Soda.

Dr. Theo. M. Kendall writes to the *Lancet* that he derived most gratifying results in a case of severe chalk gout, from the use of a lotion of ten grains of salicylate of soda to the ounce. By its use, chalky deposits in the ear were softened, and in four days disappeared, leaving only a small scar.

Treatment of Enlargement of the Spleen.

The *Lancet* says that injection of drugs into the substance of the spleen has been lately tried as a means of effecting reduction, in cases of hypertrophy. Ergot and sclerotic acid have been used. Simple puncture, causing a hemorrhagic infarct, which by repetition might cause atrophic shrinking, has been tried. This, as well as galvano-puncture has not been successful. Fowler's solution has been used. The only success worth noting has been derived from the *internal* use of ergot, which has, in one case, acted very rapidly.

Chlorodyne to Control Diarrhœa.

At a recent meeting of the New York Med. and Surg. Soc. (New York *Med. Jour. and Obstet. Rev.*), Dr. Post related a case in which, after the induction of premature labor, an injection of half an ounce each of senna and sulphate of magnesia ($\frac{1}{3}$ of the mixture), was given to relieve obstinate constipation. It caused a persistent diarrhœa, which lasted more than twenty-four hours. Morphia and tannin, by the mouth, rectum and hypodermically, failed to check it. Chlorodyne was immediately successful. Dr Post was very much impressed with the remarkable effect which seemed to result from so small a dose of senna and magnesia.

The Effects of Muscarin.

The *Journal of Nervous and Mental Disease* says that Franz Hogyes has made experiments, with the following results:—

1. Muscarin increases the excitability of striped muscle-fibre.

2. It depresses very rapidly the functional activity of the central nervous system, and lessens the excitability of the peripheral nerves.

3. The dilatation of the blood-vessels after an injection of muscarin is an immediate result of the paralytic action of this poison on the vasomotor center. Later, there ensues a depression of the smooth muscle-cells.

A Poison for Tubercular Bacteria.

The *Lancet* says that M. de Korab has cultivated the bacteria of tuberculosis in bovine blood serum, and after treating some of this preparation with *helenine*, it was found to have lost its infective properties, while similar material not exposed to this drug readily caused tuberculosis when injected into animals. We anxiously await further developments.

Quadruple Birth.

The *Union Médicale* reports the case of a woman who was delivered of three girls and a boy. The four children together weighed six kilograms and a quarter. Three were born dead and the fourth was very feeble.

Influence of Febrile Diseases on Syphilis.

It is perfectly certain that several grave febrile diseases may modify the course of constitutional syphilis so as to change, or even cause the complete disappearance of, the external manifestations of the disease. Dr. Petrowski (*Vratsch*, No. 22) reports three cases of this description.

In the first the patient had contracted the chancre six months previous to entering the hospital. He had an indurated chancre of the prepuce, balanitis, mucous patches on the glands and scrotum, ulcerations in the throat coincident with a scaly, syphilitic eruption on the face and scalp. A six weeks' mercurial course produced but slight amelioration. While at the hospital he fell sick with the smallpox; the attack was of exceptional gravity, but when the crusts of the smallpox eruption had fallen, no trace of the syphilitic eruption remained; the patient was under observation for several years, and none of the syphilitic manifestations reappeared.

The second patient, who was also at the first period of the disease, was cured after a very grave attack of erysipelas of the face, which lasted fifteen days; he had never taken any mercury, and ulterior observation revealed no new manifestation of the disease.

The third case reported is less striking; the patient had a syphilitic gumma at the angle of the jaw, and after an attack of typhoid fever, this gumma suppurated, leaving a cicatrix which bore no resemblance to ordinary syphilitic cicatrices.

The Treatment of Diabetes.

In the course of an article on this subject, in the *Medical Annals*, Dr. F. C. Curtis, of Albany says:—

"A point not often enough spoken of is the value of *fresh air*. It is one of the most desirable things to secure, which my observation bears me out in saying. Keep them out of doors constantly. Along with this, muscular exercise short of fatigue. Remember the etiological factors; sedentary occupation and nervous depression or worry or strain are acknowledged as prominent. I do not speak from statistics, but isn't the disease one of city life, and not one of quiet, contented, out-of-door country living? Securing its features of fresh air, exercise and equability of mind are certainly most desirable features toward remedying this intractable disease."

These eminently true remarks only serve to more strongly impress the fact, that such a life is conducive to the most healthy existence of the normal individual, and is, therefore, of necessity, the life most calculated to enable the morbid organism to resist for the longest time, if not to cure, the ravages of any organic disease.

The Actual Cautery for Dermato-Cellulitis.

Dr. A. C. Post reported, at a late meeting of the New York Medical and Surgical Society, (New York *Med. Jour. and Obstet. Review*) a case of chronic traumatic cellulitis, in a man aged forty. The arm was greatly swollen and brawny and its movements were materially interfered with. Repeated blistering had produced some benefit. The actual cautery was applied at a number of points, and when reported (one week after operation) the inflammation had greatly subsided. Bi carbonate of soda dressings were used.

Plica Polonica.

It has been reported (we cannot say on how good authority), that a disease bearing this name has made its appearance in London, brought over by the traders in false hair from Poland. The hair, instead of dividing into fine threads, conglomerates into thick masses, with only one root, which bleeds on being cut, so that no relief can be obtained except by cauterization of the whole mass. The disease is considered incurable, and renders its victim a hideous object.

Division of Frœnum of Upper Lip, for Imperfection in Speech.

In the New York *Medical Journal and Obstetrical Review*, Dr. Post records the case of a girl aged six, who had difficulty in uttering the labial sounds. The mother directed attention to unusual shortness of the frœnum of the upper lip, which was divided, with marked improvement.

Correspondence.

Death Produced, Probably, by a Small Dose of Potassium Iodide.

Ed. Med. and Surg. Reporter:—

The person to whom it was given was a woman of a frail, cachectic constitution, aged about 35, wife of an intemperate machinist, mother of about eight children, three or four of whom died in the early months of infancy; the last one perished in convulsions soon after birth, the causes of which I did not learn. Those who are living are apparently in perfect health.

The patient was under my care for two years almost continuously, for a complication of troubles.

Diagnosis.—Chronic, non-suppurative inflammation of both middle ears, destruction of septum narium and turbinated bones, tubercular deposit in the apices of both lungs, chronic laryngitis; digestive and procreative organs in a miserable condition.

Cause.—Probably a general tuberculosis; possibly syphilis. The last is mere surmise, no positive symptoms being present. At any rate, I decided to prescribe iodide of potassium in small quantities, about six grains three times daily, in syr. of orange peel and elix. of calisaya.

The patient was despondent in the highest degree, and no amount of cheering would raise her spirits at all. I urged her continuously, and insisted on the importance of living out of doors, but to no purpose. She would lie bundled up behind a hot stove, all the time in sweat, and at last she became so exquisitely sensitive that the least current of even warm air would almost certainly give her a "cold."

The day that the iodide was ordered was a cool and damp one; a pretty sharp westerly wind was blowing; that day she also came to my office. The medicine was taken at seven o'clock P.M., and she said that as soon as she had swallowed it a sense of suffocation came on, which lasted all night. Toward morning I was summoned, and made a diagnosis of spasmodic croup. The cause I considered to be the imprudent exposure. I never for a moment entertained the idea of the iodide being the cause. The spasm soon, however, subsided. In order to show them that it was not the iodide, I ordered the continuation of it, but, as I learned subsequently, she refused to take it.

Some three or four weeks after that her husband complained to me of his wife's seeing double, and sent her to my office. This day proved even worse than the one before, for which imprudence I gave her a sharp reprimand A slight strabismus accounted, I think, for the diplopia. With still more determination I persuaded her to take the medicine; after a little urging she took a spoonful of it, and almost immediately commenced to breathe with difficulty, which kept increasing, in spite of all treatment, until next night, at 12, she quietly passed away. The iodide was prepared by Powers & Weightman, and contains a proportion of iodate. There are no impurities that the iodide might contain, to my knowledge, which would produce any such effect on the larynx. In view of the fact that the spasm of the glottis followed almost immediately on the taking of the drug, the apparent cause and effect being quite evident, I cannot abstain from the thought that it was directly instrumental in the causation of death.

If it were a mere coincident, it would be an exceedingly strange one, to occur as it did, perfectly alike after each administration. Exposure is very frequently productive of just such troubles, especially so in susceptible subjects, but, nevertheless, it seems that that cause cannot be held responsible for the disastrous effect. For, before she took it, her breathing was comparatively easy, both times, but immediately after it the dyspnœa commenced.

Dr. Tanner has reported several cases occurring in his own practice, of spasmodic croup after small doses, and one fatal case. Another man reports a case of œdema glottidis during the use of the iodide. This exceptional effect was in this case due to some idiosyncrasy of the patient, or some impurity in the remedy.

I would like to hear, through the columns of the REPORTER, if any of the readers have had any such experience with the article.

Beaver Dam, Wis. F. SHIMONEK, M.D.

Turpeth Mineral in Acute Laryngitis.

ED. MED. AND SURG. REPORTER:—

Under the editorial head of last week's REPORTER, an invitation is extended to physicians for contributions on the various subjects of medicine, etc. In compliance, I would simply direct attention to the use of turpeth mineral (Hydrargyri Sulphas Flava) in the treatment of acute laryngitis. It is an old remedy, very much in vogue during the antiphlogistic reign, and yet it has lost none of its virtues by its banishment. In this progressive age of new theories and new remedies, we have lost sight of a great many articles of medication whose reputation was undoubted until a false conservatism tabooed their use and placed them upon the superannuated list, for more pretentious articles. The fact is, we are prone to extremes, and in our eagerness to reach the other end, fail to exercise that caution that we should with regard to new theories and new remedies. We take it for granted that it is so, and proceed to sacrifice what unlimited experience had pronounced trustworthy for very much of what, as yet, lacks confirmation. Even now the "logic of events" foreshadows an era of yet more importance, than any of its predecessors; one in which microscopic fauna and flora will be made to play a very conspicuous part in the genesis of disease, and as a consequence, will require a change in its etiology as well as a new departure in its medication. Thus far I have kept pace in the progressive march, but while doing so, take a retrospective glance, to see how much I have gained. It is exceedingly hard to get rid of old habits. I have endeavored ever since the introduction of veratrum not to imbrue my hands with bloodshed; but the temptation is so strong that I cannot resist it when favorable opportunities present. So, too, of some of the old remedies that have been placed upon the retired list; I occasionally prescribe them, in full confidence that they will respond to their old reputation.

Three years ago we had much rainfall, and the following winter was an open, changeable one. So that the conditions for the production of diseases of the air passages were as favorable as could be. Among the prevailing ones to be encountered were numerous cases of acute laryngitis, which paid no deference to age or sex, and but little to treatment. I had used the ordinary mode of medication, together with topical applications of cold, medicated vapors and the warm bath, but failed to derive much benefit until this preparation of mercury was used, when it proved to be the remedy "par excellence."

Its alterative and emetic effect is well adapted for the resolution of the inflamed larynx, by unloading the congested capillaries, thus preventing submucous infiltration as well as laryngeal exudation. It must be given early in the disease, and in sufficiently large doses to produce emetic effects. If delayed until prolabial congestion and other symptoms of imperfect oxygenation have taken place, its administration, like all other remedies, will prove a failure. It is my first choice in all cases of laryngeal inflammation, and since I recommenced its use, I have been spared that horrid sight of witnessing "deaths in lingering torments, protracted to the last."

C. F. Melsheimer, M.D.

Bluffton, Ind., Oct. 27, 1882.

Oxide of Zinc in Epilepsy.

Ed. Med. and Surg. Reporter:—

When I commenced practice, in 1833, nitrate of silver was the grand remedy for this complaint. After repeated failures with it, I was told by Dr. Boyd, an octogenarian of our city, that he had no trouble in its cure. He had treated a man successfully, who had not earned a dollar in twenty years, who afterward supported his family. I gladly adopted his practice, and have been successful ever since. The remedy, oxide of Zinc. "Begin with ½ grain dose, three times a day for twenty four doses. Then one grain for twenty-four doses. Then 1½ grains, and so on up to 15 grains, three times a day, rubbing the spine with stramonium ointment, morning and evening, and other stimulating embrocations," which I have seen used. Since then I have been successful; never going beyond ten grains, except in one case, of a hard drinker and opium taker, who at the time I commenced with him had been treated for a year with bromide of potash, impairing his memory badly, which was restored by the use of zinc.

New York. Edw. Vanderpoel, M.D.

Cancer of the Pylorus.

Ed. Med. and Surg. Reporter:—

An article in the August 19th 1882 number of your journal brings to my mind a very similar case, I have frequently thought of reporting.

In June, 1874, a patient, O. M., white, male, aged about 50 years, came under my observation, having applied to my then partner, Dr. S., and myself for treatment for what he was pleased to call dyspepsia. The history that he gave was one of simple indigestion, troubling him for years. He had suffered at no time any acute pain. Had been frequently troubled with eructations of gas, and had often vomited his food with some relief. Had no excessive tenderness anywhere. Had taken many different kinds of medicines from many different kinds of doctors, with slight improvement, and then relapse, each time growing a little worse. Had finally visited the "Gibson Wells," near here, for relief from what he thought to be digestive derangements. Had found no benefit there, and came here, and, as said before, placed himself under our treatment.

A very careful examination of him threw but little additional light upon the history already given. He digested but little of the food he ate, vomiting most of it in a state of fermentation. Complained of no special pain; was peevish and fretful. Said that if his digestion could be improved he "would be well." At no time did we notice any coffee-ground material in the vomited matters. As in the case reported, at no time, "upon the most careful and repeated examinations," could any tumor be found, though the pulsations of the abdominal aorta could be seen through the walls of the abdomen. There was nothing in the case, except the continued vomiting, to point to cancer. Finally, the patient began to eject everything, in a short time after eating. Even water was retained only a few moments. No microscopic examination of the ejecta was made.

He died June 24th, 1874, a mere skeleton. On the day of his death the vomit was extremely offensive, having a fecal odor. A post-mortem examination was made on the next day, which resulted in finding the pyloric orifice of the stomach completely closed, as with a valve, by a scirrhous carcinoma.

There is the same peculiarity about this case that there was in the one reported in your journal, and one more; namely, no coffee-ground vomit, unless that on the last day could be so considered.

T. J. Happel, M.D.

Trenton, Tenn.

News and Miscellany.

The Cradle of American Medicine.

The following is from the Michigan *Medical News*. Philadelphians are now advancing reasons calculated to establish their city as the cradle of American medicine: The first practical instruction in anatomy in America was by Dr. Thomas Cadwalader, in 1750; the first permanent general hospital was founded there, in 1752; the first clinical instruction in America was given there by Dr. Thomas Hurd, in 1756; the first medical library in America was founded there, in 1763; the first medical society in America was organized there, in 1766; the first medical dispensary in America was established there, in 1786; and the first American medical college was organized there, in 1765.

Action of the Philadelphia County Medical Society with Reference to the Army Medical Museum and Library.

At the last stated meeting of the Philadelphia County Medical Society, Dr. Wm. M. Welch offered the following preamble and resolutions, which were unamiously adopted:—

Whereas, There is reason to fear that at the next session of Congress an effort will be made to destroy the identity of the great Medical Museum and Library at Washington, by merging them into the general Congressional Library and placing them under the control of the latter; and

Whereas, Under their present management

this museum and library have grown to be the most valuable collections of their kind in the world, and are consequently, of incalculable value to the cause of medical science, thus rendering their preservation and progress objects of deep interest to the medical profession of this country, therefore,

Resolved, That the Philadelphia County Medical Society earnestly, but respectfully, request the Honorable Senators and Representatives of Congress to make no change in the present management of the Army Medical Museum and Library, but would earnestly urge upon Congress the importance of providing a commodious fire-proof building, in Washington, for better preservation and protection of these invaluable collections.

Medicated Soaps.

The *Chemist and Druggist* says that the *Seifenfabrikant* gives the following recipes for the manufacture of Medicated soaps :—

Tannin Soap.—9 kilos. of cocoanut oil are saponified with 4½ kilos. of soda lye, then 250 grammes of tannin, which has been previously dissolved in spirits, are put in and mixed. The soap is perfumed with 30 grammes Peru balsam; 10 grammes cassia oil ; 10 grammes oil of cloves.

Iodine Soap.—10 kilos. cocoanut oil, 5 kilos. lye at 38° B., 1½ kilos. of iodide of potassium, dissolved in 1½ kilo. of water.

Gall Soap.—1½ kilo. of galls are stirred in 25 kilos. of melted cocoanut oil, and the latter then saponified cold with 22½ kilos. of soda lye at 38° B. The soap is colored with 350 grammes of ultramarine green, and perfumed with 75 grammes lavender oil, 75 grammes cummin oil.

Camphorated-sulphur Soap.—12 kilos. of cocoanut oil, 6 kilos. of soda lye of 38° B.; 1 kilo. of sulphate of potassium, dissolved in ½ kilo. of water ; 160 grammes of camphor, which is to be dissolved in the melted cocoanut oil.

Chicory: A New Source of Alcohol.

According to *Erfindungen und Erfahrungen* that celebrated coffee substitute, chicory, seems likely to become of importance as a source of alcohol. The root contains an average of 24 per cent. of substances easily convertible into sugar, and the alcohol obtained by its saccharification, fermentation and distillation, is characterized by a pleasant aromatic taste and great purity.

A Graceful Tribute

The reception given by Drs. Sims, father and son, to Professor S. D. Gross, on Thursday, November 2, in New York, was a graceful tribute to a distinguished citizen and scientist by a lifelong friend and his son. The social gathering was brilliant, and the occasion was in every respect one to be long remembered. The most eminent members of the profession from the adjacent cities were there, and the evening passed off with the utmost satisfaction to all.

Southern Illinois Medical Association.

The Southern Illinois Medical Association, which numbers about two hundred members, will meet in Anna, November 15th and 16th. The meeting promises to be one of the best in the history of the organization. All members of the regular profession are cordially invited to attend. J. I. Hale, M.D., *Secretary.*

Items.

—Crude acridine, one of the heavy tar oils, is said to be an insecticide.

—A patent has been taken out in Cuba, for the manufacture of soap from the dregs of molasses. The soap so made is said to be very good and extremely cheap.

—The poison of the Borgias, according to an old Italian manuscript, was the fatty principle of ergot of rye, obtained by maceration in putrefied (ammoniacal) human urine.

—Hæmophilia is said, by the *British Medical Journal*, to be the disorder from which H. R. H. Prince Leopold suffers from time to time. He is just now recovering from some attacks of hemorrhage.

—Drs J. W. Holland and R. A. Cottrell have been succeeded in the editorial management of the Louisville *Medical News*, by Drs. L. P. Yandell and L. S. McMurtry, who are well known as medical writers.

—At the time of the plague in London, a noted body searcher lived, whose name was Snacks. His business increased so fast that, finding he could not compass it, he offered to any person who should join him in his burdened practice half the profits ; thus those who joined him were said to go with Snacks. Hence, going snacks, or dividing the spoils.—*Morning Herald*, in London *Lancet*, Oct. 6. 1823.

—An Irish woman needing some silk and some tape, sent her husband for them. The silk was shown, but the buyer thought the price too great. The clerk explained that all silk goods were dear, owing to some disease at this time prevalent among the silkworms. The tape was next examined, and the Irishman thought that a little stiff as to price. "And indade, sir," says he, " is there likewoise a dezase a-prevalin' among the tapeworms ?"

—The *Canada Medical and Surgical Journal* is responsible for the following: Not long since a doctor was attending a case of labor. About the time the baby arrived, an older chick of two years had found its way into the sick room, and watched the operation of tying the cord and separating and handing over to the nurse with marked interest. Doctor supposed the little chap was now busy with the nurse, and proceeded to remove the after birth, and just as this was about completed, the little gentleman peeped over the opposite bed-rail and piped out —*more babies, doctor ?*

QUERIES AND REPLIES.

D. N. P., N. C. From the best authorities we have in hand, we are led to say that the dentiphone has turned out a complete failure.

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Communications.

CLINICAL STUDIES OF INEBRIETY—NOTES ON TREATMENT.

BY T. D. CROTHERS, M.D.,
Superintendent Walnut Lodge, Hartford, Ct.

Notwithstanding all the temperance agitation, seen in both church and society, inebriety is increasing. This is verified by the enormous increase in the consumption of spirits, out of all proportion to the changes of the population, together with the increased manufacture and demand for beers and lighter drinks. Also the increase of pauperism and insanity, and the criminal class, from causes that grow out of inebriety.

The questions of treatment and remedy are fast becoming great national topics.

The nature and character of inebriety, and the means that will practically reach this disorder, are the problems of this age. If inebriety is ever a vice or sin, it is a question for church and State alone, a disorder which must be reached by moral means, and the application of all the machinery of societies, church and State. If this is correct, these means will of necessity lessen and remedy it. Every advance of civilization and morals will diminish or neutralize its development.

The natural history of every case, and all the efforts to reach it from the moral side, furnishes no support to this theory.

If inebriety is a physical disease, the problem is a physiological and psychological one, and its nature and character must be sought for in a knowledge of the physical causes and conditions which break out or develop into this state. The remedies and means of prevention are questions for scientific study, from which the laws and forces governing it can only be understood. The presence of one hundred thousand inebriates in this country cannot be a mere vicious element of human nature, but is really the result of certain physiological and psychological forces, moving in obedience to laws that are fixed and definite.

A history of the different methods of treatment in efforts to cure and prevent inebriety, forms one of the most interesting chapters of psychological literature. Like all other advances of science, the subject of inebriety and its treatment are passing through a formative stage, out of which will emerge the facts and laws which govern its rise and progress, and the means of prevention.

An outline of the different methods of treatment will show the confusion and doubt following this subject at present.

The treatment of inebriety in ancient times varied but little from that of to-day. In the book of Deuteronomy the parents of a rebellious son are commanded to bring him to the elders of the city, and say, "This our son is glutton and drunkard, in order that he should be stoned."

It is clear, from this and other references to drunkenness in the Hebrew civilization, that severe penalties were used to check and prevent such excesses. It was considered a sin to use alcohol beyond a fixed limit of moderation. In ancient Egypt, certain stages of inebriety were called madness, and the victims were confined

in mines and forced to work as slaves. If the offence was repeated, they were held as prisoners and forced to work on the public works, in many cases for a lifetime. Inebriety existed here to a greater or less extent, from the king to the peasant, but was diminished by the eagerness of the monarch to keep up a large force of offenders to do public work.

The physical character of inebriety is clearly outlined in the following sentences, translated from an old papyrus, and evidently written by a temperance man who had violated his pledge.*

"Whereas, it has been told me, that thou hast forsaken books and devoted thyself to pleasure, and that thou goest from tavern to tavern, smelling of beer at the time of evening; if beer gets into a man it overcomes his mind. Thou art like an oar started from its place, which is unmanageable every way; thou art like a shrine without its god; like a house without provisions, whose walls are found shaky. Thou knowest that wine is an abomination; that thou would'st not put liquor into thee. Hast thou forgotten thy resolution?"

Many of the sculptures of both Egypt and Thebes exhibit inebriates in the act of receiving physical treatment from their slaves, such as purgatives and rubbings, or applications to the head and spine. In the Grecian civilization, the question of treatment became more prominent, and decided methods were practiced. Solon enacted laws making inebriety in a governor, ruler, etc., a capital crime.

The senate of Areopagus punished those who were given to drink and convivial company. Plato, in his laws, says, "Shall we lay down a law that boys shall not taste wine at all until they are eighteen years old? Urging that, after that period they might use wine in moderation, and when forty they could indulge freely at the meetings in celebration of the gods. Restrictive legislation existed at this time in varied forms, probably consisting of punishment to those who drank to excess. Pittacus, the lawgiver, instead of allowing inebriety as an excuse for crime, directed that it should be followed by a double punishment. The Greek women at one time used wine so freely that a law was passed forbidding its use, because of the danger of transmitting the tendency to the next generation. Among the Romans, although inebriety prevailed to an alarming extent, yet little effort was made to check it. The Bacchanalians, who held wild revels, in which the worship of Bacchus was celebrated with continuous inebriety, were forbidden by a decree of the Senate to hold any meetings, and were punished for the excesses of drink in which they indulged, but this only lasted a few years. By many of the leading men, inebriety was regarded as a great national sin. The history of several centuries shows that, at intervals, legal restrictions were imposed on inebriates, sometimes very severely. Ulpian, the noted Roman jurist, in the second century of the Christian era, wrote that drunkenness was madness, and that inebriates were sick men, and should be treated as such. In law, they should be considered as largely irresponsible. At one time laws were enacted recognizing the physical character of inebriety, but there are no records which indicate that they were applied practically. The early fathers of the church considered inebriety a sin, and the possession of the devil, only to be cured by fasting, prayer and humiliation. Cases of signal deliverance from this satanic influence are mentioned in a spirit of devout thankfulness and acknowledgment of the grace of God, showing that the influence of church and the power of prayer and faith were used in that early day.

In the thirteenth century the physical character of inebriety was recognized in the lessened punishment for crime in this state. Capital crime in this condition was punished by banishment to an island for a stated number of years. In the next century these laws spread into Germany and France, having been embodied, with various modifications and changes, into the jurisprudence of all nations down to the present time. Thus the theory of the old Roman jurist, that there were certain conditions of inebriety in which the person could not realize the nature of his responsibility, has been recognized from time to time in all the legal efforts to control this disorder. A vague, confused notion of physical disease has prevailed, gathering strength from every careful study of the subject. With but few exceptions, to the church alone was left the whole subject of treatment. Occasionally legal measures would be instituted, but they were seldom carried out any length of time, hence inebriety was one of the sins to which the church devoted its efforts to destroy. A moderate use of spirits was not a sin, but only the gross excesses in which good order and decency were violated. The references of the Bible to drunkards were used in a wide, liberal sense, and marshaled to sustain the theory of vice and wickedness. This has been increased by iteration, from one generation to another, and embodied in essays, sermons and temperance literature, until

*See Tuke on Insanity.

its accuracy is unquestioned; although all scientific and practical acquaintance with the subject furnishes data for the most opposite conclusions.

There are no indications that the punishment of inebriety in the past either cured any one or lessened the prevalence of this disorder.

Severe laws might for a time force the inebriate and his friends to observe secrecy in covering up his condition, but the practical effect of such laws always made the victim more incurable. This treatment by legal means has become more severe and unnatural as the idea of vice and possession of the devil grew in the minds of the public. To-day, where this idea prevails to its fullest extent, the harshest means and the least sympathy are exercised in the treatment. The reform that was conceived and carried out by Pinel, raising the insane to the level of human sympathy, and applying means that would reach down to the wants of every case, has scarcely begun with the inebriate. Although inebriety is the most widely diffused of all maladies, the general methods of treatment are the same to-day as those used in the care of the insane a century ago; outlined in punishment in jails, penal discipline of all kinds, persecution, strict accountability, as those who know fully the nature of their actions and can at all times control themselves. This treatment (as in the care of the insane, long ago) is building up a class of paupers whose presence is a growing menace to all civilization and good government. Some of the difficulties of treatment are found in the obscurity of the disorder and the peculiar delusion of strength and capacity to recover at will. In this way the patient's real condition is concealed from all experts and students of science. The social prejudice against calling a man diseased who can in some instances control himself, and from apparent exercise of the will power abstain from the use of spirits for an indefinite time, is misleading. It conveys the idea that recovery is dependent on the will power alone, when in fact these are but the few exceptions to the rule. To illustrate, take one hundred inebriates who sign the pledge under conditions of much excitement, and all in earnest to get well. Five years later all have relapsed but two or three. These will be men of peculiar nervous organization, who have been profoundly impressed by the act of signing the pledge. The power of the will has been so great as to control the diseased organism, probably aided by many other conditions that are psychical and unknown. Take the same number of cases of malaria; rouse up their minds to the same intensity of thought, and endeavor, and keep this up until the nervous system is fully impressed by it, and without doubt a certain number would recover. Or bring the same number of inebriates under the influence of powerful religious emotions, and introduce the element of expectation of permanent recovery by the means of God's grace, and some cases would be thoroughly cured. The same is seen every day in the faith cures, or places where religious emotions are relied upon almost exclusively to produce cures. Cases of severe organic disease have been apparently checked by this means, and the mind kept buoyed up on faith and expectation, until recovery followed. What these forces are and how they control the organism are unknown; but any inference of their value as means of treatment, to the exclusion of other methods, would be erroneous to the highest degree. The treatment of inebriety is passing through an era of wild empiricism, in which the most extraordinary means and methods are urged as curatives. A mere mention of some of them will be of interest, as illustrating this stage of the history of inebriety. First among them is the "Mind Cure," in which the patient is gradually reduced from the amount of spirits he has been taking, until he goes about with a small bottle in his pocket, educating himself to *touch*, *see* and *handle* it, but *not taste* it. The familiarity of the mind with spirits is supposed to be followed by a disgust and recovery. The will, by this method, is to be built up to control the diseased impulses that demand spirits.

The emetic cure has many followers, and is a system of giving drugs to continually nauseate the patient, and at intervals produce emesis. The irritant or blister treatment, by some unknown process is supposed to remove the cravings for spirit. Blisters of cantharides, mustard and iodine are applied over the spine and stomach. Baths of cold water, both shower and plunge, and profuse sweating, have many advocates. The whisky cure is one that has a wide reputation, but strangely enough there are only one or two instances of its use upon record. The treatment consists of having all food and drink mixed with spirits, until the patient is thoroughly sickened. The method by salt water had some notoriety at one time; consisting of the free use of salt water externally. Whenever the patient felt a desire for spirits, water, both internal and external, was freely applied, and the disease was checked. Tea, coffee, and food

of the richest kinds, have been used to check the impulse to drink, sometimes with success, and generally, they delay the desire for a time. Several instances of this means of treatment are on record, consisting of giving all the tea, coffee and food that a patient can swallow, both after and at time spirits are used. The result is that prostration follows vomiting and general engorgement, and in most cases the derangement of the digestive organs supercedes the acute symptoms of inebriety.

Of six specifics advertised to cure inebriety in this country and England, four were found to contain alcohol in large amounts. The others contained aloes and gentian. Three had some form of opium, two bromide of potassium, and four contained cinchona. One, advertised as Chloride of Gold, contains no gold, but large quantities of zinc. All of little or no value except as general tonics. A half a century ago English and French papers contained advertisements of specifics for insanity, with certificates of cures, which of course were signed by clergymen, who have ever been the first to recognize "short cuts" to health by the means of drugs. Medication has usually been a secondary means of treatment, urged and applied by friends of patients, and when taken by the victim, has been to bring about the ideal state where he could use spirits in moderation. One of the gravest errors in the treatment of inebriety, or application of means for relief, is a journey to Europe. Although there are no records of any cases which recovered by this means, yet it is the constant advice of both physician and friends to inebriates, to go abroad for a change of surroundings, air and scenery, hoping by this means to be restored. Every summer hundreds of this class can be seen on out-going steamers, accompanied by friends, or alone. The discomforts of the voyage, the exciting causes of excesses on the steamer, and the common use of beer and wine, there and throughout Europe, make it almost impossible to abstain.

They are always subject to the usual annoyances and pleasures of travel, with the absence of all regular habits of living and care of their bodies. As a result, they become rapidly more and more chronic. The use of stronger alcohols to excess gives way to large quantities of wine daily, and because the mind does not suffer from stupor, the inference is that much is gained and recovery sure.

Instances are noted of severe spirit drinkers who, in Europe, used wine for a long period of time, and when they returned and began the use of spirits, died suddenly, from some obscure cause following the resumption of stronger liquors. The use of wine may cover up the degenerations that are provoked by stronger liquors; the experience of nearly all cases who return from a health trip to Europe, where the cure of inebriety was the object, is that they are far worse and more broken down in health. All travel which brings new temptations to the victim cannot benefit him. and everything which breaks up the regularity of the organism, followed by a constant strain to adapt itself to the new conditions, must of necessity limit the power of recovery.

Many temperance people are full of hope that the use of beer and wine in place of stronger spirits presages a new era of abstinence and freedom from the evil of spirits. But literally this is only a change in the form of the disorder, to be followed with more certain degeneration, although it may be delayed and concealed from general observation.

The beer and wine drinker are as certainly diseased as the excessive spirit drinker. The former may continue for years without any prominent symptoms, and die at last of some intercurrent disease not recognized, while the latter may have a short-lived course of progressive degeneration to death. Yet both of them follow a march of degeneration that is steady and positive to a fatal termination.

DISGUISED SYPHILIS.

BY T. CURTIS SMITH, M.D.,
Of Aurora, Ind.

Your recent editorial upon this topic was so much to the point, that I think the experiences there related will find their counterpart with many of your readers. How long the human family have been so numerously contaminated with this specific disease is more than I know. I am, by clinical observation, made very sure of one thing, viz., that the ramifications of syphilitic poison are far more varied and extensive than even many medical men will readily admit. Position in society, however exalted and sacred, is no evidence against specific constitutional contamination. I hold in my mind now a large family of parents and children, who will average as high in points of respectability, honor, honesty and religious culture, as any family of a similar number one will find in a day's search. Whether either parent knows or suspects the presence of specific disease in their veins, I cannot say. But sure I am, that one parent died not long since with a disease that, to my mind, had its

origin in a brain lesion that primarily depended on syphilis. The other parent, still living, has a nervous disease—utterly incurable now—the inception and history of which can only be accounted for on the grounds of constitutional syphilis. The children, now quite all grown, and all of whom I have at one time or another treated, have all marked characteristics of inherited syphilis. In every serious attack of any form of disease affecting any of them, there is always a tendency to become chronic in type. If, however, the proper treatment for constitutional syphilis is added or mixed with such other treatment as would be otherwise indicated, they will recover as promptly as any other patients. In this whole family, the disease is so masked that nothing short of a pretty thorough knowledge of constitutional and hereditary syphilis and the whole clinical history of the family, will avail to open any physician's eyes as to their real condition. At my first acquaintance with them I was totally in the dark as to the reason of their slow recoveries from their illness. Once in the realm of real certainty as to the presence of specific disease, I had little more trouble with them than is common with others.

The following case, taken from notes made of it, occurred in practice ten years ago.

Mrs. V., æt. 28, mother of four children, youngest æt. 18 months. I found her pale, anæmic, emaciated, feeble pulse, no appetite, depressed in spirits, and thoroughly broken down. Had been sick for six months, most of the time in bed, during which she had been treated for phthisis pulmonalis, by a fairly capable physician. She and her friends believed she had phthisis, and was incurable. Her respirations were 24 per minute, pulse 120. She had no headache, but considerable vertigo; was unable to sit up or to lay entirely down; tongue furred, bitter taste, breath fetid, mucous membrane of pharynx congested and sore; has frequent, dry, hacking cough; sputa white, frothy and tenacious; voice hoarse and very feeble; respiratory murmur clear, somewhat exaggerated all over both lungs; resonance clearer and louder than usual, owing, perhaps, to attenuated chest walls; could find no evidence of cavities or of tubercular deposits, though she had twice been the subject of hæmoptysis; temperature normal. Abdominal viscera quite healthy. Uterus congested; granular cervicitis and profuse muco-purulent leucorrhœa. The post-cervical region presented a few enlarged glands, as did also the inguinal spaces. Sigmund's gland also indurated. Eleven months after her last confinement she had menstruated once, but not after that date. A month later she had slight hæmoptysis, repeated in three weeks again. After that, she had an attack of epistaxis quite regularly, every three to four weeks, the blood continuing to ooze from the nose for three to four days. This hemorrhage nearly always occurred from the left nostril, which I found to be quite closed with a thick, black incrustation. These hemorrhages always increased the already great prostration.

What disease was she laboring under? Evidently not tubercular phthisis. I found no lesion, or set of symptoms to give name to the disease very distinctly or satisfactorily. Reasoning by exclusion, I was only left to strongly suspect that the whole trouble in this case had its origin and continuance in specific contamination. The poison had produced disassimilation through its pernicious influence over the glandular and venous systems, from which resulted a deteriorated condition of blood and enfeebled tissues, giving an outcome of anæmia, emaciation and prostration. This led to deranged menstrual functions, to local congestions and hemorrhages from—perhaps the lungs twice but certainly—the nose, this latter coming from the Schneiderian membrane. These hemorrhages were in the form of vicarious menstruation.

To make the report short, I have only to say, she was put upon anti-syphilitic agents, with ferruginous and vegetable tonics, and some collateral aids. She made a very good recovery and has lived a fairly healthy and useful life since that time, now more than ten years.

If this was not "masked syphilis," what indeed was it? Tonics had been thoroughly tried before I took the case in charge.

A few weeks since a four years' old child was brought to me, with an ugly eruption around the nates. No other difficulty was present, as it would have seemed, by a careless inspection. The report of the case was that it had taken so much medicine, and had so many severe burning applications made, that it seemed useless to try more. The eruption was a year old. A little well directed and quite pleasant anti-syphilitic treatment very promptly relieved the child. Another not dissimilar case, in an adult, was, by a similar plan, promptly relieved. This too had been grossly medicated, and why the real disease in each case had not been promptly detected and relieved, was quite strange indeed, in view of their certain symptomatology.

A young lady was brought to me by her father, some years ago. He was a wealthy and highly

respected farmer. She had a staggering gait, utter inability to look up, *i. e.* raise her head so as to direct the eyes upward, her feet were numb, lower extremities weak and tremulous, the post-cervical muscles were stiff, and turning the head was painful. Any attempt to read resulted in severe pain in the head and general confusion of ideas. The right arm was less sensitive than the left; she had formication everywhere, and constant feeling of depression. She was well preserved, appetite fair, bowels costive, menstruation regular but painful. Her nights were disturbed, often sleepless; had a feeling of bed turning over much of the time. Had I a case of ataxia? A further search showed a few glandular enlargements, some chronic pharyngitis, a history of nasal catarrh, of very frequent attacks of so-called rheumatic pains in the legs, but nothing definite to clear up the case; there was no discovered ear trouble. Her father finally told me she had been through the hands of such and such physicians. I knew them to be capable men. They had named it spinal disease. I placed her on anti-syphilitic treatment, merely on suspicion, viz: mercury and potassium iodide. She made prompt improvement and rapid final recovery. Was this a case of disguised syphilis, inherited? I do not know. If not that, I have no name for it. If a case of ataxia or brain tumor, or spinal meningitis, it could not have recovered so promptly under any treatment.

A young married lady came to me several years ago, pale, anæmic, weak, costive, nervous, considerable insomnia, loss of appetite, and general prostration. Her catamenia were regular; considerable leucorrhœa. Was troubled almost constantly with muscular pains in her extremities, shoulders and breast. No decided symptoms of any particular disease were present. She was barren. With careful directions as to rest and systematic exercise, diet, bathing, etc., I prescribed a tonic course of treatment. No improvement occurred. A month of faithful treatment failed to yield benefit. Repeated search of every organ failed to elicit decided symptoms pointing clearly to any one disease. Nor did her history show specific contamination. A little further knowledge of the husband gave me the key. She was placed on anti-syphilitic agents and promptly regained her health. Was this merely an accidental recovery?

A carpenter, æt. 32, was laboring under what gave all the appearance of being severe intermittent fever. For two weeks I plied him with anti-periodics, in no small doses; yet the chills and fever returned every alternate evening, with unfailing certainty. One night, about 11 P.M., after he had had a very severe paroxyms of apparent ague, I was called to him in great haste, the messenger saying that he was dying, from pain in his head. Visions of a case of extreme cinchonism floated before me as I approached his residence, for I had given him immense doses of quinine. Reaching his bedside, I was not a little surprised to find the pain caused by as typical a syphilitic node on the right frontal prominence as any patient ever had. Suffice it to say that the quinine was replaced with potassium iodide, and followed by very prompt recovery. Not another exacerbation of fever appeared.

I was called in consultation with a physician, to see a child, quite two years old, in a family of the so-called "upper crust." Affluence had furnished every needed comfort. An innocent mother sat watching the crib of her infant. The father—known to have been contaminated—presided with dignity. The child had been long ill and was gradually wasting away. A careful inspection showed the undoubted manifestations of inherited syphilis, which need not be named here. In the consultation the plans of treatment used were set forth by the attendant. No treatment of a specific character was named. The diagnosis of hereditary syphilis was proposed, and after naming the reasons for such an opinion, was assented to by the attendant, and the treatment ordered accordingly. The child made a good recovery. In this case, an able physician knew of the father's contamination, yet if he recognized the heredity of it in this child, he had failed to put his knowledge into practical use.

Only this week, I discharged a case of pleuro-costal neuralgia, regularly periodic in character, and very severe, too, that I treated almost wholly with specific remedies. He took about four or five doses of morphia during the week of treatment, enough cathartics to keep the bowels well open, some slight adjuvant local treatment, but chiefly he took potass. iodid., and hydrargyri biniod. Why such a treatment? Did I know him to be a syphilitic? No. But his habits in general and a few glandular enlargements, carefully sought for, caused me to adopt that plan of treatment. It was successful. So might some other course have proved curative, but I do not believe it would have done so as readily as this did.

A few years ago a young man came to me with temporal neuralgia. Said he could find no relief, except for a while, under morphia. I

found no local cause for his suffering. His teeth were all sound and none of them tender. He was reduced in strength, anæmic, weak, worn out with suffering. His neuralgia came every afternoon. He had no clear manifestations of syphilis, yet I believed him to be contaminated, because Sigmund's gland was enlarged. On this slender testimony alone he was put on a mercurial cathartic, followed by magnesia sulphate, and this was succeeded by the very free use of potassium iodide. He soon recovered thoroughly. He had been on antiperiodics freely without any permanent relief. The specific agents soon afforded the needed comfort.

About a year ago I was called to treat a child of ten years. She was a thin, anæmic child, with poor appetite, costive habit, much continued pain in the right side, in the region of the liver, and extending down to the umbilicus. Also all over the left pleuro-costal region, and continued dull pain in the head. These were always severe in the afternoon, and especially at night. There was no enlargement of the liver, no derangement of digestion, except want of appetite, no sign of lung disease or pleurisy; no evidence of organic brain lesion, no spinal tenderness. She had a severe, hard, dry cough, seemingly produced by a congested condition of the mucous membrane of the pharynx and larynx. The heart beats were normal in sound, but far too frequent. There was no fever; feet and hands cold. What had I here to treat? No very well defined disease, as commonly described or met with, but a case of general debility, anæmia, and nerves crying out for better blood—neuralgia. She was placed, after a cathartic, upon general and ferruginous tonics, generous diet, passive exercise, and as much change of scenery and associations as neighborhood visiting would permit. For three weeks the best tonics and feeding were continued without any observable benefit. I had from the first observed that her teeth showed signs of syphilitic influence, that she had a full pleiades of enlarged post-cervical glands; that the epitrochlear and inguinal glands were adenoid; that there was a shriveled and scurfy appearance of the skin, but her marked debility and anæmia called for the combinations of mineral and vegetable tonics, aside from these specific manifestations. She was now placed on half a grain of hydrarg. proto iodid., three times a day, and iodine tincture over abdomen and left half of chest freely once a day. Tonics continued. The change that took place for the better in the next week was quite surprising to see. Potassium iodide was added then, and the mercury left off for a week. She soon became strong, healthy, vivacious, a rosy hue taking the place of the tawny complexion she had at first. Was this a case of hereditary syphilis? If not, what was it? Two others, a brother and sister, had also some of the ear marks of the disease, and the father was reported to have died of some form of consumption; the mother seemed to be healthy.

Last winter I treated a man, aged about thirty, for pneumonia. He was of good constitution, and soon bid fair to recover, but was left with a severe cough and a hepatized condition of the middle lobe of the right lung. The cough was the result of this and the remaining bronchitis. His use of proper tonics and expectorants availed but little, in ten days, for his relief. On seeing his two-year old boy about this time, it was quite observable that he had many distinct signs of hereditary syphilis. It could not be so without receiving this contamination from one of the parents. The father gave no distinct marks of the disease at that time, but I placed him on potass. iod. freely, and an evening dose of half a grain of hydr. protiod. His recovery from that date was prompt and all that one could desire. Was this recovery simply accidental?

Some months since I was called to see a little child of sixteen months. It had pneumonia, and was very ill. It also had a few clear marks of hereditary syphilis. It was treated for pneumonia without any special reference to this, and made a good and prompt recovery. But the mother was feeble, thin, anæmic, nervous, had sore throat and many muscular pains, especially at night. The clue given by the child led me to a careful investigation of her history. Slowly and by degrees I drew out a syphilitic history, all unsuspected by her, a thing I would scarcely have thought of doing, but for what I had seen of her child in the cradle. She was placed on antisyphilitic remedies, and made a prompt recovery of all her present ailments. She informed me, when better, that she had taken "so much medicine without being improved, that she had been quite discouraged." Later I treated the husband, and there found unmistakably the first source of this lady's sufferings, and of the child's specific symptoms.

One other case and I will suspend further weariness to your readers. Mr. W., æt. 31, son of a highly respected farmer, had been employed in one of our large cities. His health had so thoroughly broken down, that he "returned to his father's house," bringing a hale and buxom

wife with him. He expected to remain an invalid for life, if country modes of living did not restore him. I was at his father's house six months after his return, on other business, when my attention was called to this invalid and his incurable condition, and I was asked whether I thought it advisable to attempt any further treatment. I found him with tawny skin, fetid breath, severe cough, great pain in the chest walls, very feeble pulse, constant so-called rheumatism of his joints. He was emaciated, dyspeptic, constipated, urine scant, high colored, in short, nothing normal about him. There was no real lung disease, to account for the cough or the pain in the chest. The viscera seemed, for the most part, doing their part as well as they could under the conditions present. He had a few small glandular enlargements, no decided specific marks anywhere, yet his general history and the absence of decided lesions in any organ, led me to suspect syphilis. I said to him. "I do not consider your case hopeless. I think you can be cured." He was placed on anti syphilitic agents, with tonics and good diet. In four weeks he rode twenty miles to see me, and was greatly improved. In two months more he returned to his labor, and has, I believe, so continued ever since, now three years.

Was he a syphilitic? I do not know. If not, the treatment was all wrong. Nor do I know that he had ever had "a chancre." This I do know: every member of the "respectable father's" family, including four sisters and three brothers, showed quite unmistakable marks of laboring under hereditary syphilis, and every one has suffered or do now suffer from this hereditary contamination, if my judgment of their condition is correct. If any one, in view of the multiplied experiences of this kind, by our profession, is disposed to ask "when and where he shall look for syphilitic disease and its ramifications," it certainly would be well for him to change the form of the interrogatory and ask, "where, when, and among whom shall I not look for it?"

I would not have any one infer that every one has it. Some are pure as the morning sun. Nor are mercury and potass. iod. the only remedies for this disease. Far from it. Many others are as valuable in some cases, and more valuable in others, than they are. Great care should be exercised in using mercury. Ptyalism is worse than useless in all cases of syphilis.

It is scarcely necessary to add more cases in this line. No doubt every observant physician has seen scores of them, and an infinite variety of the phases in which this hydra-headed monster arises in practice. It may involve any organ or portion of the system. No tissue is exempt from its baneful influences. There are very few diseases it may not simulate, especially of those of the glandular, muscular and nervous varieties. These may be often relieved without anti-syphilitic remedies, but never so promptly as with them, where the taint is present.

I use the word "*relieved*," because this is as far as we can go. I believe, with Fournier and Hewitt, viz., "a person who is once a syphilitic is always syphilitic, and his very ghost after him will be syphilitic." True, men seem to be cured, and who cannot affect a so-called cure? which only means that the poison is overcome for the time, only to arise in rebellion again at some more favorable season, unless efforts for its complete removal had been very thorough and prolonged. When we remember this fact, and also the salacity of the human race, the want of moral stamina in the millions, and how readily the disease is communicated in venereal indulgences and transmitted to the offspring, there can be little surprise that we find it almost everywhere, or at finding it anywhere among the ranks of society. The wonder sometimes is that physicians so often fail to see it where it is so manifestly and clearly present, though in irregular form.

Shall some say "this report includes many cases where syphilis very probably did not exist, and his general alterative and tonic treatment cured them." I readily grant that this may be so, but I further say that I have for the most part reported cases that were obscurely syphilitic, if so at all, and will also state that in a very large proportion of such cases coming under my hands, they have had other than specific treatment first. This either failed altogether or partially. Then they were placed on anti-syphilitic treatment, and this seemed to effect prompt relief. A large number of such experiences has led me to regard most of these cases as those laboring under specific contamination, the primary lesion having been more or less remote, or not at all known or even suspected by the patient.

Very many cases, clearly syphilitic, yet not known to be so by the patients, could be reported here. But we have preferred to report those cases that were marked and very liable to pass unobserved by even medical men, unless they have had a few eye-openers in this class of practice.

Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROFESSOR WILLIAM H. DRAPER.

Reported by W. H. Seelye, A.M., M.D.

Hemiplegia.

The examination of the patient by a student, and the reading of the hospital reports, brought out the following facts.

Patient's age is 37. Has had many occupations, but the last was bookkeeping. Has not been much of a drinker, and his habits are good. His father died at the age of 52, from heart disease. His mother was past 70 years of age when she was found dead in bed, one morning. Patient has had typhoid fever, smallpox, measles, scarlatina and all the diseases of children. Has never had much rheumatism, but only a little pain in the joints occasionally. Was never laid up with it.

On awaking, early one morning last June, he felt a peculiar pain in his left hip. He got out of bed but found he could not move the leg, so he began to rub it. There was no sensation below the hip, and it felt to him as if all below this joint was gone. Soon the leg began twitching and jerking up and down, and then it extended to the left side, and finally crept up to his arm and neck. He then lost consciousness for a few moments. The twitching lasted between one and two hours. After the attack there was complete loss of power in the left leg, but nowhere else. During the attack he did not froth at the mouth or bite his tongue. He soon regained the use of his leg, and was well for several months. In September he had a second attack, similar to the first, but he did not lose consciousness. Recovery was not as rapid or complete as after the first one. There was loss of power in the left arm as well as the leg. His third attack was on Sunday morning, October 2d. It was like the others, but it ended with a long continued tonic spasm of the left arm. He has not been able to use his leg since. The next Thursday he gave up business and came to the hospital. On October 18th, at 10.40 P. M., he awoke from sleep with a clonic spasm of the left foot, which extended up the left side and arm, and there was a tremor of the hand. The attack lasted two minutes. It left him weak and nervous. On October 27th he had another attack, with clonic spasms, and violent jerkings of the limbs, which lasted forty-five minutes. The spasms immediately ceased on the introduction of a hypodermic needle into the arm, for the purpose of injecting Magendie's solution of morphia. He has not lost consciousness in any of the attacks since the first. Has had no paralysis of the sphincter muscles of the anus or bladder, no urinary symptoms, no headache, and there was no frothing at the mouth or biting the tongue in any of the attacks.

A brief physical examination showed loss of power in the left leg and arm. The patient remarked that he now felt an attack coming on, but it was only marked by a momentary twitching of the left arm and a slight flushing of the face. There was thought to be a slight murmur with the first sound of the heart. There was noticed a little difference in the strength of the radial pulse on the two sides.

Now, gentlemen, you have heard the history, and seen the physical examination of the patient, such as he can tolerate, and the question arises as to the cause of the trouble. But first, if, as has been suggested, there were a difference in the radial pulse in the two wrists, how might it be accounted for? The most common cause of such a variation, is an abnormality in the origin of the superficialis volæ artery, which may be given off from the radial a little higher up than normal. So that in taking the pulse, the finger may press upon this instead of the radial artery. Or it may be due to a less quantity of blood flowing into the arm, which, for lack of use, is wanting in vitality. Or it may result from an aneurism, or possibly from an embolism higher up in the artery, or from anything causing pressure on the trunk of the vessel. When you find a difference in the radial pulsation, you should always think of all the possible causes of this phenomenon.

We now come to the question of the cause of the hemiplegia in this man. In studying a case of hemiplegia, we must always think of the possible causes of it, which are, briefly, embolism, thrombosis, apoplexy, or a tumor in the brain. Or a temporary spasm of the arteries of the brain causing a disturbance in the circulation, may cause a hemiplegia for the time being. Now how will you proceed to reason from the facts in your possession, as to which of these causes is active here? The proper way is to compare these facts with the peculiar symptoms which are apt to be associated with each cause, in succession. And first, we can exclude a tumor as the cause. For the paralysis resulting from the pressure on the brain of a tumor, is more localized and more persistent than in this case. Most of the attacks here have been followed by only a temporary loss of power, and then a gradual but only partial recovery, which has been less perfect, after each attack. We will next look for thrombosis. This is usually the result of a calcification or an endarteritis in the vessels, which causes the formation of a blood clot at some point, which plugs up the vessel. The same result may follow from an endarteritis obliterans. But there is nothing in this man that looks like senility, and his radial arteries show no marks of degeneration. And a thrombosis results in a final obliteration of the artery, and so, from lack of nourishment causes a softening of the brain tissue about it. But here we see no evidences of cerebral softening, and his general health is good. So we exclude thrombosis.

Next comes embolism. This is the plugging of an artery by a clot transferred from some other part, usually from one of the valves of the left heart. The commonest course for such a clot to take is up the left carotid artery, then into the internal carotid, and next into the left middle cerebral or sylvian artery, in which, or its branches. it becomes fixed, and so occludes the artery. Now do the facts in this case point to the probability or improbability of embolism?

Embolism occurs most frequently in youth, and if a hemiplegia occurs at this age it is a strong argument in favor of embolism as the cause, and it is a powerful factor in making the diagnosis. An attack of rheumatism, either in its acute stage or at some time after, is liable to give rise to an endocarditis, which results in the formation of vegetations on the valves of the heart, and this is the origin of an embolus. This man's age is too far advanced to suggest the youthful stage in which we commonly find embolism. There is another fact peculiar to embolic hemiplegia, which will aid in the diagnosis. It is that where you get an obstruction of the cerebral artery from an embolus, you are apt to get other embolic plugs in other regions of the body. For usually there are many vegetations on the cardiac valves, and several of these become detached at the same time, and some go into the carotid artery while others go into more distant vessels. But they are more likely to go into certain organs than to others. Thus a splenic embolism is quite common. And so also with the kidney. But a plug in the renal artery is generally followed by hæmaturia. So it is always important to examine the urine of a child who is suffering from an endocarditis. In embolism of the spleen there is a swelling of that organ, from congestion caused by the interference with the return circulation; for the parts beyond a plug in the splenic artery do become congested and infarctions are apt to follow. When this occurs in the kidney we get hæmaturia. Again, a plug in the brachial artery may occur and cause an absence of the radial pulse in the wrist of that side. As these accidents, which are apt to occur at the same time with a cerebral embolism, are all absent in this case, it is so far an argument against the probability of this being the cause of the hemiplegia in this case.

If we exclude embolism we have left apoplexy. This consists in an extravasation of blood in some portion of the cranial cavity. It may be between the dura mater and the skull, or in the cavity of the arachnoid, or in the subarachnoidean space, or in the substance of the brain itself. The onset of the apoplexy may be either sudden or gradual, and it may or may not be attended with convulsions and loss of consciousness. The symptoms will depend upon the amount, the suddenness and the locality of the extravasation. This man's first attack was accompanied by convulsions and a brief loss of consciousness. He soon recovered, and was quite well for a time; then he had another attack, followed by not so complete a recovery, and then a third, and less complete recovery. So we have to argue that he had three separate hemorrhages before he came to the hospital. But where in the brain could you have three successive hemorrhages, followed by almost complete recovery, in so brief a time?

There is one important point to notice in these cases, gentlemen, and that is, whether there has been any permanent loss of sensation. Where the seats of sensation in the brain are not involved there will be only a temporary disturbance or loss of sensation. But in this man there has been no permanent loss of sensation, but he is rather more sensitive on the paralyzed side than on the other. This indicates that the optic thalamus is probably not involved. You would hardly expect to have any considerable hemorrhage in the corpus striatum, the motor tract, the crura, or the pons, without a permanent paralysis. For a large hemorrhage would be likely to cut off bundles of nerve fibres of considerable size, which would be followed by a permanent paralysis. But yet I think the hemorrhages in this case were in this locality, but were small and only of sufficient size to cause temporary disturbances and paralysis. They may have been either in the cortical substance of the convolutions or in the white substance beneath, and from the decided regional character of the loss of power, it looks as if they had been in the white substance. And this gives weight to the opinion of some, that there are certain localized motor spots in the brain, which, if disturbed, cause a paralysis in certain groups of muscles which they govern. I think that the brief tonic and clonic convulsions from which he frequently suffers now are due to changes going on in and about the clot. For nature sets up inflammatory changes which result in a slow compression and contraction of the clot, and finally it may become almost obliterated. This process of contraction is probably now going on here, and by irritation produces the occasional attacks of which he complains. These attacks were controlled very well for a time by the bromides, but they caused so much constipation that he had to give them up. From the straining, rendered necessary by the constipation, he thinks the loss of power was aggravated. As to the truth of this we cannot say.

Where there has been a large hemorrhage into the brain there is usually a permanent rigidity of the affected muscles, while the changes are going on in and about the clot. But here the limbs are not permanently rigid, but are rather flaccid, and so the clots are probably small. There is a more marked return of power in the leg than in the arm, here. But this is usual, for recovery usually first takes place in the muscles which control extensive movements.

Bright's Disease.

The next patient did not speak English, so a very satisfactory history was not obtained. Patient's age is 25. Born in Denmark; is single; occupation a sailor. Is a moderate drinker. No history of syphilis or rheumatism. Three days ago he began to suffer from headache, pain in the lower extremities and across the lumbar region; cough, with a thick, grayish mucous expectoration, and other febrile symptoms. His bowels have been irregular, but generally constipated. At the time of his admission, on Nov. 8th, his temperature was 101°. Nov. 9th, at 6 A.M., normal. At 12 M., normal. At 4 P.M., 101.4°. Nov. 10th, to-day, at 6 A.M., 103.6°. At present it is 103.6°. He had a chilly sensation at about four o'clock this morning. He has had some slight œdema of the feet, but this has now disappeared. Yesterday his urine contained a little albumen, but no casts. To-day it is free from both. He has passed 48 ounces in 24 hours. It contains no blood, but has a few leucocytes.

You will note, gentlemen, that when he came in he had some fever, and since he came in he has had fever with remissions and exacerbations. He has also had some albuminuria and œdema of the lower extremities, which have pretty well subsided now. These are the clinical facts of importance. He says his last voyage was in a German steamer, from Bremen. He has not been in Africa or South America.

Inspection.—The patient was a large, well built, young man, somewhat fat or fleshy, with light hair and blue eyes, and clear complexion. His face appeared slightly anæmic. The chest and abdomen showed nothing unusual. There was very slight œdema of the ankles.

Palpation.—The abdomen gave no signs of fluid by fluctuation.

Percussion.—The upper margin of liver dullness was on a level with the nipple, and the lower line was at the free border of the ribs, and it extended further to the left than normal. Showing that the liver was much enlarged. The spleen was also found to be very decidedly enlarged. The præcordial dullness was normal, and so also was the pulmonary resonance. Percussion on the back gave the same results.

Auscultation.—There was a prolongation of the first sound of the heart, but this was not very marked. The respiratory sounds were normal.

Now, gentlemen, the symptoms we have elicited are, some œdema of the feet, enlarged liver and spleen, fever, and no affection of the heart or lungs, and slight anæmia. What is the logical sequence of these events? From what is the man suffering? It is probably not acute Bright's disease, for the urine is not diminished. Both in acute parenchymatous nephritis and in congestion of the kidney we get either reduction or complete suppression of the urine, and we are apt to get more or less anasarca, as well as albumen and casts. But none of these conditions are here present.

The œdema might be a sequence of malarial fever. But we have no account of his having been in malarial regions. If we had found that before he came in here he had had regular intermissions or exacerbations we would probably infer that he is suffering from malarial fever. He has the peculiar anæmia and the enlarged spleen and liver of malarial poisoning, and so I think that the primary element was probably a malarial poisoning at some recent time, and this has brought about the congestion of the spleen, liver and kidneys. And now there is a recurrence of the febrile disease; and the watery condition of the blood, together with the feeble action of the heart, have given rise to the œdema.

It may be that he has had, some time ago, more acute symptoms of Bright's disease than he now presents, and so we should be careful to inquire if there has been any reduction in the urine or any œdema, in the past. This extensive anæmia may be the result of a recent acute parenchymatous nephritis. I speak of acute parenchymatons as the most probable form of nephritis in this case, because there is not here the appearance nor the history of chronic Bright's disease. As he cannot speak English we cannot obtain any information as to the former attacks, at present. He will be more carefully examined hereafter.

Medical Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, October 26th, 1882. The President, Dr. James Tyson, in the chair.

Hypertrophy of the Prostate Gland, Accompanied by Profuse and Fatal Hemorrhage.

Presented by Dr. J. B. Roberts, for Drs. J. M. Adler and Wm. Hunt.

The clinical history furnished by Dr. Adler is as follows: The patient, aged 66 years, of medium size, weighing 150 pounds, of regular habits, had enjoyed good health until within one year past. On a number of occasions during the past year he has had slight hæmaturia. He passed his urine with ease, and only complained of slight perineal pain. On the 12th of September last he arose in the morning, in his usual health, but soon after breakfast he was attacked with sudden, acute pain in the bladder, which he was unable to empty. Dr. Adler saw him in a short time, when the patient complained of great hypogastric pain, and was much prostrated, with a blanched, sallow, cold skin, and a rapid and feeble pulse; a well defined pyriform swelling occupied the hypogastric region, extending upward to the umbilicus. After stimulants and morphia had been given, about one pint of fluid blood was drawn off by the catheter, after which, this instrument becoming blocked, a double one was introduced, by means of which injections of warm water were thrown into the bladder, and another pint of broken down coagula were removed. A solution of alum, 20 grains to the pint, was then introduced into the bladder and allowed to remain. Despite the internal use of ol. terebinth and ol. erigeron, with opium suppositories, the hemorrhage continued, necessitating recourse to the catheter, injections etc., to free the bladder from coagula. Death ensued on the sixth day, from exhaustion induced by the repeated hemorrhages. The diagnosis arrived at by Drs. Hunt and Adler was carcinoma of the neck of the bladder.

Sectio cadaveris.—The autopsy was a partial one, made in the undertaking establishment. Upon incising the hypogastrium, the distended bladder was at once seen, containing nearly a pint of clotted blood. This was removed by the hand, through an opening in the viscus, when Dr. Roberts felt, near the vesical neck, protruding into its interior, a pear-shaped mass, about the size and shape of the adult uterus. This, as the members of the Society saw, was evidently a greatly enlarged middle lobe of the prostate gland, covered by unaltered mucous membrane. The lateral lobes were also enlarged. The mucous lining of the viscus was smooth and congested, presenting at one point two small circular depressions, with cleanly cut edges. Owing to circumstances, no further examination of the body was made.

Dr. Eskridge inquired whether the blood removed from the bladder at the autopsy presented a urinous odor? He had treated recently an interesting case of recurring hæmaturia, supposed to be due to a varicose condition of the veins of the vesical neck. The patient was a man, æt. 77 years, who, five years ago, and at intervals since, had lost considerable blood. The former attacks had yielded readily to ergot, but shortly after the onset of the last one, Dr. Eskridge had found the bladder distended with a large clot, which he had been unable to break down by injections of either alkaline or acid solutions. The secretion of urine was suppressed during the last twenty four hours of the patient's illness, the blood drawn from the bladder presenting no characteristic odor. The man died apparently from uræmia, two or more severe chills preceding death, although no convulsions occurred, and he remained conscious to the last. Unfortunately, no post-mortem examination was obtained.

Dr. Formad thought that the growth resembled rather a sarcoma than carcinoma. He had seen two instances of round-celled sarcoma of the prostate. All growths starting from the epithelia of the genito urinary tract, as well as from the cavity of the uterus, the kidneys and supra-renal bodies, in short, growths of all the organs arising from the middle layer of the blastoderm, microscopically resemble sarcoma, and usually prove to be such, when microscopically examined.

Dr. Tyson said that this specimen possessed a special interest for him, inasmuch as he had had his attention forcibly directed to the differential diagnosis of a simple hypertrophy of the prostate from malignant disease of that organ, by having lately under his care a gentleman, where ergot at first proved of much benefit, but in whose case the catheter was soon demanded. This instrument was used with unusual skill and gentleness by the patient himself, notwithstanding which blood occasionally followed its use. Exceedingly severe pains next developed, radiating from the bladder to the testicles, groins and inner aspects of the thighs. Emaciation soon set in, and he died at the end of 15 months. At the autopsy malignant disease of the prostate was found, involving by infiltration the lateral aspects of the bladder and the neighboring parts, so as to compress the nerves, thus accounting for the radiating pains complained of. He would like to know from Dr. Roberts whether his case presented this symptom of radiating pains, and also the source of the hemorrhage, as the smooth surface of the growth, and the healthy condition of the mucous membrane of the bladder, are such as to excite surprise.

Dr. Roberts, in reply to the various questions propounded, said that, only having made the post-mortem examination, he knew nothing beyond the facts given in the notes read. As to the source of hemorrhage, he would call attention to the two small erosions of the mucous membrane of the bladder as the probable source.

Report of the Committee on Morbid Growths.—The specimen presented by Dr. Roberts, upon microscopic examination, is found to consist of the histological elements composing the prostate gland. There is no evidence of any neoplasm, except a numerical hypertrophy of the structures of the organ. The specimen is a hypertrophic prostate gland.

Caseous Degeneration of the Kidneys.

Presented by Dr. J. B. Roberts, for Dr. Dunmire:—

Owing to Dr. Dunmire not having seen the woman until within a few hours of death, the history is of necessity imperfect. She was a married woman, 39 years old, whose husband is said to have infected her with some form of venereal disease. The husband had been dead for about one year when the patient first came under treatment. There were no evidences of syphilis, so that the supposed venereal affection of the past had been presumably gonorrhœa. When seen, September 14th, 1882, was exceedingly ill. Gave a history of general ill health for the past few years, but dated the present trouble some weeks back, when she had bathed in the surf while menstruating. This was followed by a chill, since when she had steadily grown worse. When Dr. Dunmire saw her she complained of sore throat, difficult deglutition, anorexia, sick stomach, pain in the back, with sharp pain running toward the groin, especially on the right side, tenderness over the abdomen, and frequent, scanty micturition. The pulse was 140, the temperature 103°, and there was profuse leucorrhœa. An unfavorable prognosis was given, which was soon verified by her becoming unconscious and dying six hours later.

Autopsy.—The abdomen alone was allowed to be examined. All organs healthy except kidneys and bladder. The latter contained a little urine and mucus, its walls were much thickened and its lining membrane was congested. The left kidney had little true kidney structure left, but was converted into a group of seven or eight cysts, containing a white, cheesy material, of a moderately firm consistence. The ureter was much dilated and thickened for about three inches from the pelvis of the kidney. The right kidney was normal in outline, but when incised revealed one large cyst, with creamy contents, and also another small cavity containing a few minute calculi. Several of these could be felt through the walls of the normal ureter, thus accounting for the ante-mortem renal colic. The perinephritic structures were unchanged, as well as the capsules of the kidneys, although these latter were perhaps more adherent than normal.

Lymphomatous Tumor of Mediastinum.

Exhibited by Dr. W. S. Little for Dr. G. C. Smith, of Rondout, N. Y.

The history of the patient from whom these specimens were removed is, in brief, as follows: A young man, æt 24 years, had been but a few days under Dr. Smith's care, having come from Boston, where his physician had pronounced him phthisical, and had recommended a sea voyage. During the past few months small, nodular masses had developed in the muscular tissues of the right chest walls, near the median line in front, and also posteriorly. The axillary and supraclavicular glands were involved.

Shortly after Dr. Smith first saw him he developed marked dyspnœa and died suddenly, without any evidences of marked lung disease, except, perhaps, some symptoms of pleuritis. There was apparently mitral disease. Anasarca, especially of the lower extremities, gradually developed.

Sectio cadaveris.—The skin was hard and friable; nodular masses were found disseminated through the muscular tissue of the chest-walls, which had undergone some species of degeneration; the costal cartilages presented evidences of a degeneration similar to that seen in the muscles. On removing the sternum, the subjacent tissues were markedly pigmented, and the anterior mediastinum completely obliterated by a mass of the size and shape of the half of a large lemon, which pressed against the heart. The large bronchi were involved in the growth; otherwise the lungs seemed healthy, and evidences of slight pleurisy were found. The pneumogastric nerves were both involved, chiefly the left, and on further dissection the disease was found to occupy all of the lower part of the posterior mediastinum, involving the contiguous osseous tissues. The nerve involvement explains the sudden death. The diaphragm was also involved in the lower portion of the growth. The four portions of the growth shown to the Society are: 1st, one of the subcutaneous nodules; 2d, a small portion of left lung, near its root; 3d, a portion of the anterior mediastinal growth, with part of trachea, bronchi and aorta; 4th, one-quarter of the tumor, which, involving the diaphragm, projected from the left thoracic wall into the chest cavity.

Dr. Formad inquired whether there were any other evidences of cancer in the remainder of the body.

Dr. Little replied that none were detected.

Dr. Formad then said that he was unaware of any specimen of primary carcinoma of the mediastinum on record, and moved the reference of the specimen to the Committee on Morbid Growths, as it was probably a sarcoma.

Report of the Committee on Morbid Growths.—The mediastinal growths are found, on microscopical examination, to consist of a mass of hypertrophic lymphatic glands, much pigmented. There are also seen adipose and fibrous tissues in a state of active proliferation.

Cirrhosis of Liver in the Stage of Enlargement.

Exhibited by Dr. E. T. Bruen.

T. W., aged 20 years, colored; has worked on a farm since boyhood, and has been much exposed to weather. His habits were temperate; he was free from either syphilitic or malarial taints. Father is still alive; the mother died of phthisis. He was never robust, but had had only one severe illness, viz., typhoid fever, from which he convalesced perfectly, but he readily "took cold." He was first seen by Dr. Bruen at the University Hospital, in January, 1882, when he gave the following history.

Abdomen began to swell two years ago, with neither pain nor tenderness. Was obliged to rise at night, to urinate. The abdominal swelling increased, and the previously regular bowels became constipated. Occasional sharp, shooting pains were felt across the chest when lifting weights or working hard, and also slight, dull pain over liver, lasting for a few moments only. When seen abdomen measured 50 inches. On 19th of January he was tapped, nineteen quarts of fluid being removed, rendering plain a much enlarged liver, covered with smooth, nodular elevations, with the apex beat of the heart displaced upward into fourth interspace. March 18th, five gallons more fluid was removed, after which pleural and bronchial complications arose, which soon subsided. May 6th, paracentesis by capillary needle was resorted to, which was followed by much localized tenderness around the site of the punctures. Symptoms of peritonitis developed next day, which terminated life the same evening. During life, the diagnosis was most difficult and interesting. The enormous size of the liver, the palpable bosselation of its surface giving a sensation like that of crepitating tissue, as though fluid-lymph had been thrown out; and finally his abstemious habits, with absence of either syphilitic or malarial taints, suggested malignant disease. His age, the excessive rarity of primary carcinoma or sarcoma of the liver, with his family history, all negatived this view. He had had some dyspepsia. Enlargement of the liver connected with catarrh of the bile ducts, would have presented symptoms of jaundice, and intermitting temperature, terminating by death from cholesteremia. The case, then, was one of simple cirrhosis.

Sectio cadaveris.—The abdomen contained six gallons of purulent fluid. Both the parietal and visceral peritoneum were covered with a thick coating of inflammatory lymph, tinged with blood, from multiple capillary hemorrhages. The abdominal veins were all replete with blood. The liver weighed nearly 5½ pounds, was of a nutmeg appearance; on section was indurated, and presented a bosselated, nodular appearance. The gall bladder was thickened and contracted about two-thirds in bulk. The bile ducts were normal. The spleen was covered by a pseudo-cartilaginous capsule but was otherwise normal, as were also the stomach, pancreas, intestines, kidneys and supra-renal bodies. The abdominal lymphatic glands were slightly enlarged,

Dr. Seiler remarked that, having seen the case during life it was almost impossible to divest oneself of the idea of malignant disease. He thought that the projections were the unaltered portions of the liver, which had been compressed and squeezed out by the contracting interstitial tissue.

Dr. Bruen remarked upon the obscurity of the etiology.

Dr. Tyson asked Dr. Formad, who had examined the specimen microscopically, whether he considered it to be in the first or second stage of the affection.

Dr. Formad replied that he considered it to be in the commencing second stage, and detailed the microscopical appearances.

Dr. Tyson, after briefly adverting to the causation of cirrhosis, said that his reason for asking Dr. Formad whether he considered that the organ was in the first or second stage of cirrhosis, was, that some few years since an

important insurance case had been argued in our courts, where the defense was set up that the man had not a cirrhosed liver, because it was enlarged. For his part, he had no doubt that a liver could be in the second stage of cirrhosis, and yet be enlarged; there might be enlargement from fatty infiltration, concurrent with interstitial inflammation.

Editorial Department.

Periscope.

Intravenous Injection of Fluid for Hemorrhage.

Dr. C. Edgerton Jennings, in the *Lancet* says:—

On August 20th, at about 3 P.M., M. A. S., a patient of the London Hospital Maternity Charity, pregnant, and nearly at term, fell in the courtyard adjoining her house, suddenly becoming the subject of profuse ante-partum hemorrhage. At 5 P.M. I found her collapsed to a marked extent, lying on a sofa in her bedroom, the pulse barely perceptible, the skin cold and clammy, extreme pallor of the face, an anxious expression of countenance, sighing respiration, and slight jactitation. Blood was flowing from the vagina; the mucous membranes were blanched. Upon examination, I found the os uteri fairly dilated, the right shoulder presenting; the membranes were unruptured, and the edge of the placenta could be felt just within the os uteri posteriorly.

At this critical juncture I remembered the cardinal rules laid down very clearly by Dr. Palfrey in his lectures on Obstetric Medicine, for the management of cases of this description—viz., to arrest hemorrhage, to correct the malpresentation with the least possible shock, and, by cautiously employing stimulants and restoratives freely, to allow the patient to rally and deliver herself spontaneously. A drachm of brandy, with one of water, was injected into the gluteal muscles; the membranes were ruptured, and the left leg brought down into the vagina with considerable ease, owing to the flaccid condition of the parts and the amount of general anæsthesia present. The abdomen was kneaded, the hemorrhage ceasing. To have accelerated delivery at this period would, I think, have proved fatal. Two grains of sclerotic acid, in solution, were injected into the buttock, and the woman was covered up with blankets. I left an assistant steadily kneading the uterus, and returned to the hospital for a transfusion apparatus. Not being able to procure a blood-giver, it was determined to try a saline alcoholic intravenous injection.

I may observe, parenthetically, that great difficulty was experienced in finding a vein, owing to the profound anæmia existing. The patient's right elbow was immersed in hot water, and the cubital triangle thoroughly sponged. These means, added to friction of the part and the adaptation of a turn of a bandage around the arm, were successful in causing the veins to stand out with some prominence; an incision was made over the median basilic, the vein exposed, isolated, and an aneurism-needle armed with a double ligature passed beneath it. The distal ligature was tied, the vein opened, the nozzle of a three-ounce metal syringe, charged with the fluid already prepared, inserted; the proximal ligature tied loosely over the nozzle of the syringe, and the piston pressed slowly home. This was about 6 P.M., the woman being moribund. The syringe was emptied; it was disconnected, refilled and readjusted, the process being continued till sixteen ounces of fluid had been injected. Signs of animation very rapidly appeared—recognition of people present, speech, vision and hearing returned, and complaints of pain in the abdominal region were made. The syringe was withdrawn, the proximal ligature on the vein now tied tightly, the wound closed with the interrupted suture, and a compress and bandage applied. Another grain of sclerotic acid was injected hypodermically, and the case left to nature, delivery occurring at about 7.30 P.M., without any further operative interference whatever.

I may add that the saline alcoholic solution employed in this case consisted of twenty ounces of water at about 100° F., into which was stirred a powder containing exactly the following ingredients: Chloride of sodium, fifty grains; chloride of potassium, three grains; sulphate of soda and carbonate of soda, of each twenty five grains; phosphate of soda ($Na^3\ Po^4$), two grains. To the fluid thus prepared two drachms of absolute alcohol were added. The subsequent progress of the patient has been most favorable. The highest temperature (Aug. 23d) noted since delivery was 102.4° F.; the wound at the elbow healed kindly, and the woman has proceeded to an uninterrupted convalescence.

I believe I am correct in asserting that transfusion is commonly regarded as a theoretical rather than a practical operation—as one to be performed in the theatre of a hospital, but not in the country village or wayside house. With the view of facilitating the method of intravenous injection, Messrs. Maw, Son, and Thompson, have made for me a small case containing a few feet of elastic tubing, to be used after the principle of a nasal douche or syphon, canulæ of different sizes, a pair of dissecting forceps, with fine points, a scalpel, an aneurism-needle and ligatures, a graduated bottle for alcohol, and room for some saline powders. Here, within very small compass, the accoucheur has the means, with the addition of a jug of hot water, of combating very speedily the effects of alarm-

ing hemorrhage. This is, I submit, a more practical method than the transfusion of blood: here no blood-donor is required, and no risk—it may be urged a trifling risk—to a healthy life incurred.

Unilateral Inguinal and Femoral Hernia.

In the *Lancet*, Dr. J. M. Cotterill says:—

The subject of hernia is one full of interest to the surgeon; and this is mainly due to the fact that not only does considerable difficulty occasionally present itself in making an exact diagnosis, but that we so frequently meet with complications of widely different natures, such as inflammation, adhesions, strangulation, hydrocele, malposition of the testicle, and the like, giving rise in their turn to various symptoms and risks to the patient, and calling for a careful consideration and treatment of each case on its particular merits. In illustration of this statement the following case may be of some interest.

On June 15th, 1882, I was asked to see Mrs. G., aged sixty-four, who was reported to be suffering from severe pain in the abdomen, persistent vomiting, constipation, and other symptoms of intestinal obstruction. The history of the case was, that eight days previously to my seeing the patient vomiting and constipation had set in, and in spite of the adoption of the usual lay treatment in such emergencies, she had grown steadily worse, the abdomen becoming somewhat tense and very painful, and the vomiting after the fifth day of the illness becoming slightly fecal in odor and appearance. Getting alarmed at her condition, she sent for medical advice, and the gentleman who saw her, recognizing her symptoms as those likely to be due to strangulated hernia, and on examination finding an inguinal hernia in her right groin, reduced it without difficulty, and left his patient, as he hoped, in a fair way to recovery. The following day, however, she was considerably worse, and symptoms of collapse so rapidly set in that at noon she was fast sinking, and by the time I reached her house, at two o'clock, she had died.

I had an opportunity of carefully examining the body after death, and found that the hernia, which had been reduced over night, and which was of the direct inguinal variety, had again protruded, owing, no doubt, to the constant vomiting; but it was easily capable of reduction, and it turned out, on inquiry, that the patient had suffered from this reducible hernia for some forty years past. At first I naturally suspected that this hernia had become strangulated, and had been reduced *en bloc*; but on making a more careful examination I discovered a small femoral hernia on the same side of the body, which had escaped previous notice, from its comparatively small size and from the great development of superficial fat over the patient's body. This femoral hernia was about the size of a walnut, tense and irreducible, and there seemed every indication that it had been the cause of death. It seems strange that it had not attracted the notice of the patient, but she had made no complaint of it, and seemed to have been unaware of its presence, referring the pain and other symptoms to the inguinal hernia lying close above it. As no medical advice was sought until two days before death, when, judging from the symptoms, gangrene of the gut and peritonitis had supervened, it is not probable, even if the exact nature of the case had been then recognized and herniotomy performed, that the case would have terminated satisfactorily.

The comparatively rare occurrence of two forms of hernia on one side of the body, and the fact that one of these, apparently the fatal one in this instance, had been overlooked, seem to render this case deserving of record.

The Action of Hot Foot Baths.

The London *Med. Record* says that Dr. Sholkovsky (*Vratsch*, 1882, No. 7) undertook a series of experiments, in order to elucidate the influence of an ordinary hot water foot bath on temperature and circulation in all remote parts of the body. The experiments (as many as 115) were made mostly on quite healthy subjects, and on few weak and anæmic persons, in the period of convalescence from various acute and chronic affections. The duration of bath varied from fifteen to twenty minutes, and the temperature between 107.6° to 114.5° Fahr.; but, as a rule, the author used a fifteen minutes' bath, at the temperature of 108.5° to 110° Fahr. The water reached nearly up to the knee. He arrived at the following conclusions. 1. Under the influence of a hot foot-bath, the temperature in the external auditory meatus gradually rises, reaching its maximum within five minutes after bath. The elevation generally oscillates between 0.1° and 0.3° Reau., but sometimes is as high as 0.5° Reau. 2. The axillary temperature in the vast majority of cases rises also, but less considerably. Its elevation mostly varies between 0.1° and 0.2° Reau., and never goes higher than 0.3° Reau. (one case of 47°). 3. The rectal temperature in the vast majority of cases decreases, reaching its lowest point after bath. The fall is persistent, and generally varies between 0.1° and 0.3°, but sometimes (2 cases of 47°) is equal to 0.4° Reau. 4. Plethysmographic measurements of the upper extremity show that the volume of the limb in the first moments of the bath rather decreases, but then begins gradually to increase, reaching its maximum approximately about the mid-time of the bath, and remaining at the maximal height to the end. After the bath, it begins to decrease very slowly. 5. The measurements of the radial tension, taken by means of Basch's sphygmomanometer, show increase of it during the bath, and the next ten or fifteen minutes. The average increase is equal to 8 millemètres, maximal to 17 millimètres, minimal to 2 millimètres. 6. The observations on the character of the pulse wave (in art. brachialis, studied by means of Rothe's and Knoll's apparatus) show that the latter presents all qualities described by Landois, Moens, Bernard, etc., as typical for a wave under high blood-pressure (the more round apex, the appearance of dicrotic indentation, and of so-called elastic elevations nearer to the apex, and so on). 7. The number of pulse beats

generally increases, the maximum of the increase being 24, the minimum 3, the average 5. After the bath, the acceleration of pulse disappears rather rapidly (comparatively with all other phenomena produced by the use of hot foot-bath).

Tardy Development of Scarlatinal Nephritis.

At a meeting of the New York Obstetrical Society (New York *Med. Jour. and Obstet. Rev.*), Dr. J. F. Jenkins narrated the facts of a case as follows, and asked the Society to draw the inferences:—In a well-to-do family in Dobb's Ferry a death occurred, September 6, 1881, from diphtheria following scarlet fever. The family went to the seaside for a month, and in the meantime the house was thoroughly disinfected, regardless of expense, by an officer of the New York Health Board. During the fatal illness the mother remarked to him one day, that on the day previous another of the children had what the servant girl called nettle-rash. It was so trifling, producing no symptoms, that little attention was paid to it. After a month they returned from the seaside to the house, and remained there until January, when they came to New York, and, five months after the fatal illness, and the appearance of the blush on the child's skin, blood corpuscles and a moderate amount of albumen were found in his urine. The physician who saw him believed it to be the result of an attack of scarlet fever, which the child must have had while in the country. Was it likely that a scarlatina dating back over five months was the cause of the appearance of important renal changes?

Dr. John Byrne suggested that the nephritis might have been excited by cold. He had known nephritis to follow scarlet fever after a month, six weeks, or possibly two months, but in the present case, five months having elapsed, he should look for some other cause. Being asked by Dr. Jenkins if he did not think, had the nephritis been present after the thirtieth or sixtieth day from the appearance of the blush, it would have produced positive symptoms before the hundred and fiftieth day, he replied in the affirmative.

Dr. J. E. Janvrin had recently attended cases in which the nephritis made its appearance as late as the fifth or sixth week after the fever, but not later. In one case there was no desquamation until the nephritis developed, when it occurred on the body and extremities; in other respects the scarlatinal attack was normal.

Dr. C. S. Ward could see no reason why Dr. Jenkins' case might not have been one of progressive kidney disease, discovered at a late date.

Phosphorus.

The *Lancet* says that Meyer has been experimenting on the action of phosphorus on frogs and rabbits, employing an emulsion with gum, or a solution in 100 parts of olive oil, the alkaline reaction being carefully neutralized with carbonate of soda. A milligram of phosphorus introduced beneath the skin caused in half an hour a transient increase in the liveliness of the animal's movements. Ten milligrams caused at first excitement, but the animal died in the course of one or two days. No very striking poisonous effects were observed, however, even from the use of larger doses; a diminution of motor power and sensibility came on only after a considerable interval. Once set in, however, the symptoms rapidly increased, and death usually resulted in an hour. No tetanic cramps were observed, and the muscles and nerves after death preserved their normal irritability. The liver, as a rule, presented normal characters, and the heart was distended with blood, slight pulsation continuing in the auricles. Atropine had no influence upon it, but chemical excitants of muscle, salicylate of physostigmin, or camphor, aroused the heart to renewed activity. Further experiments led to the conclusion that phosphorus causes a paralysis of the automatic nerve centres, and later affects the muscular tissue itself. In rabbits, also, no clonic muscular contractions were observed in phosphorus poisoning, but a slow, steady diminution of the blood-pressure, which sank to zero, in consequence of the arrest of the action of the heart. The vaso-motor nerves were not at all affected. Cases of phosphorus poisoning in man have been observed, in which, without any considerable disturbance of the general system or of the central nervous system, death occurs suddenly. Meyer is inclined to regard these as cases of paraylsis of the heart, for he succeeded, by introducing phosphorus directly into the circulation, in causing complete paralysis of the heart, before any pathological change had been produced in the heart or liver which could be discovered after death. To exclude the possibility of embolism in these cases, special precautions were taken. An analysis of the blood of rabbits which had been poisoned by phosphorus showed that the amount of carbonic acid which could be extracted had diminished from 50 to 80 per cent., and he thus corroborates the diminution in the process of oxidation in the body and the increased destruction of albuminous bodies.

Writers' Cramp.

The *British Medical Journal* says that Professor Nussbaum, of Munich, has recommended a new method of treatment for this lamentable condition. Considering that, whatever the site of the malady, there is always a spastic contraction of the flexors and adductors, with a weak condition of the extensors and abductors, he set himself to contrive a pen holder that should be directed by the extensors and abductors, instead of the flexors and adductors. This he believes he has accomplished in what he terms a bracelet. This bracelet is a stiff band of gutta percha, oval in shape, about $\frac{1}{8}$th inch thick and $1\frac{1}{4}$ inch broad, having a long diameter of about $3\frac{3}{4}$ inches, and a short of $1\frac{1}{4}$ inch. It is therefore wide enough for all five fingers to be slipped into it, but in using it, the thumb is only just entered, the fourth finger is entered almost as far as it will go, and the little finger is left outside. It is evident that the

bracelet can be held firmly only by expanding the fingers strongly, that is, by the use of the extensors of the first four fingers, and the abductor of the thumb. To this bracelet the pen is screwed, so as to be in contact with the paper when the hand lies on the table. The instrument is made in different sizes, by Stiefenhofer, of Munich. In order to collect a large experience, Professor Nussbaum advertised in the newspaper the gratis treatment of writer's cramp, and had, accordingly, a considerable number of well marked cases. He states most absolutely that every one of these cases at once wrote easily and distinctly with this instrument, not a trace of spasm appearing in any one of them. All expressed themselves as feeling specially comfortable in using it, and some of the patients, after a time, acquired the feeling that they could again write in the ordinary way, without fear of spasm. Professor Nussbaum commends the treatment, therefore, in his preliminary notice of it, for trial by those who have such cases under their care. As we have said, it is extremely simple, and has this very strong recommendation in its favor, that in place of the patient being forbidden to write, he is encouraged to write with the instrument as much as he possibly can, in order thereby to strengthen the antagonists of the muscles liable to the spasmodic contraction.

Veratrum Viride in Puerperal Eclampsia

Dr. N. L. Guice read a paper on this subject at the last meeting of the Mississippi State Medical Association. After reciting several illustrative cases, the author offers the following conclusions.

1. Given hypodermically, in such quantities as will reduce the pulse as low as 60 to 80 beats per minute, the effect upon the spinal nervous centre is such that the convulsive paroxysms are arrested.

2. So long as this effect is maintained by the judicious use of the remedy, the convulsions will be held in abeyance.

3. The convulsions being thus completely within the grasp of the practitioner, time is given, in cases where the labor is progressing, for its safe completion by the natural forces.

4. Where eclampsia has supervened upon gestation, at any period prior to its completion, or at the end of the same, but prior to the inception of labor, the use of the veratrum viride will, by suspending the convulsions, give abundant time for the induction of labor by gentle and safe means, and for its completion by the powers of nature, thus doing away with the necessity for speedy and forcible delivery and the dangers attending that process.

5. Veratrum is easily and safely administered; it does not produce stupor or otherwise interfere with the intelligence of the patient, and thus enables the attendant to form a better idea of the actual state and progress of the disease.

6. It is believed that if the profession will *fairly test* the powers of veratrum in puerperal eclampsia, it will be found to possess marked advantages over all other remedies now in use for that disease.

7. The well-known action of veratrum viride as a *powerful spinal depressant*, coupled with its admirable efficacy in controlling the spasms of puerperal eclampsia, *should lead to a rigid test of its powers against* that painful and fatal disease—*tetanus.*

Amputation of Both Legs Without the Use of Ligatures.

Dr. J. H. Blanks reported the following cases to the last meeting of the Mississippi State Medical Society (*Transactions*):—

Willie D., aged 18, in attempting to get on a locomotive while in motion, received a compound comminuted fracture of the left leg at the lower third, almost severing it, and a crushing injury of the right foot.

He willingly consented to amputation of the left foot, but as there was but very little external laceration of the right, he insisted that an attempt at least be made to save it. This we had but little hope of accomplishing, as the bones were crushed, with evidence of extensive injury to the soft parts and laceration of the blood vessels, but as he would not consent we made the attempt.

He was put under chloroform; then, with the assistance of Drs. Kirkland and Lowry, the left leg was amputated at the junction of the middle and lower thirds; the tourniquet was then relaxed, but no spouting or pulsation at the stump followed, although there was good pulsation at the popliteal space. We waited an hour or more (for hemorrhage); patient was fully from under the chloroform: and then brought flaps together, and applied the usual dressing; left tourniquet in position for another hour, with instructions to nurse should hemorrhage occur, but none occurred. The arteries were not tied and union by first intention, almost, was the result.

Profuse sloughing and offensive suppuration at last convinced my patient that the other foot was lost, but not until septicæmia was well developed.

On the 23d day the right leg was amputated at the point corresponding with the first, with similar results. No vessels ligated; no hemorrhage, and union by first intention.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The extended use of iodoform in surgery is highly commended by Dr. David Prince, in a reprint from the St. Louis *Medical and Surgical Journal.*

——In "A Practical Laboratory Course in Medical Chemistry," Dr. John C. Draper has arranged a number of notes for his students, with intervening blank leaves on which they can be extended from his lectures. The plan is a convenient one (Wm. Wood & Co., New York).

——To the Guiteau literature is to be added "Reflections on Criminal Lunacy, with Remarks on the Case of Guiteau," by Dr. Charles K. Mills (reprint from Trans. Penna. Med. Soc.). He is of opinion that G. was insane, and should not have been hanged. Criminal convicts, he thinks, should be treated in asylums especially for their care.

——In a recent reprint, Dr. C. L. Dana, of New York city, discusses "Some Points in the Physiology of Digestion." His conclusion is that peptones are valuable, but more because they contain much nutriment than because they are very absorbable. They increase metabolism. Pancreatic extracts have not been proved to be of value when given medicinally, and they are probably destroyed in the stomach. They may be of use, he thinks, in partially peptonizing foods before such foods are used.

BOOK NOTICES.

The Physician's Pocket Record and Visiting List. By S. W. Butler, M.D. Revised for 1883. 30 patients, $1.50 ; 60 patients, $2.00.

Of the numerous visiting lists in the market the above has won a large share of patronage from the profession. It has the advantage over all others, that it can be commenced at any period of the year, and will continue useful for twelve months, whereas most others become as useless as an old almanac after the calendar year for which they are designed expires. The "spring clasp" is also highly appreciated, on account of its greater security and convenience.

To those who have not as yet made trial of this list, we recommend that they provide themselves with it for the year 1883. It contains many memoranda and tables of daily usefulness, and compactly and accurately presented.

Questions in Anatomy. By Samuel O. L. Potter, M.D., etc. With 63 illustrations. Philadelphia: P. Blakiston, Son & Co., 1882. Cloth, 8vo, pp. 139. Price $1.00.

This is No. 1 of a projected series of "Quiz-compends," by various authors, designed to help students through their various trials and troubles before they can reach the proud title of M.D. They are an improved form of the ancient "Neill & Smith's Compend," and the various "Aids," and "Vest Pocket Guides," which have, time out of mind, been favorites with students. They are not to be condemned, although they often are. Properly used, they fill a respectable niche; relied upon too exclusively, they are detrimental to sound learning. Of the kind, this is an excellent specimen, as good as any we remember to have examined.

A Guide to Therapeutics and Materia Medica. By Robert Farquharson, M.D. Third American edition. By Frank Woodbury, M.D. Philadelphia: H. C. Lea's Son & Co., 1882. Cloth, 8vo, pp. 526.

The fact that a third edition of Dr. Farquharson's work has been called for in a comparatively short time after the second had been issued, is very satisfactory evidence that it is a book which has solid merit. All will acknowledge this on examining it. The author is a concise, clear writer, and condenses much information in little space. The additions of the American editor are large in amount, and selected with great discrimination.

In his preface to this edition the author notes the comparative lull in therapeutic investigation during the last two years. He does not think that much of value has been added during that time. It is to be hoped that this is but a temporary delay in the onward march of this important branch of our art.

Microscopical Diagnosis. By Chas. H. Stowell, M.D., and Louisa Reed Stowell. Illustrated. Detroit: Geo. S. Davis, 1882. Cloth, pp. 250.

Dr. Stowell begins his volume by a sweeping statement, which we must protest against as untrue. It is this: "The great majority of the medical colleges of this country * * seek to prejudice the students against the scientific investigation of disease." Apparently he refers to the use of the microscope in disease. But certainly he is very far from correct in this statement in any sense, and for the credit of our country and profession we cannot pass it by in silence.

The book is divided into three parts: the first by Dr. Stowell, on the use of the microscope in examining blood, epithelium, muscle, urinary deposits, parasitic disease, tumors, etc. The second part is upon the examination of vegetable fibres, wheat, drugs, etc., and is, we understand, the result of the observations of Mrs. Stowell. The third part is on the mounting of microscopic objects. The text is illustrated with 148 wood-cuts and 47 figures on stone.

The descriptions are clear, and the value of the microscope is set forth with much force and precision. All who are interested in professional progress should familiarize themselves with the practical use of that instrument, and there are few better treatises than this one, to assist them to that end.

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D. G. BRINTON, M.D.,
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PHYSICIANS AND POLITICS.

"It is no wonder," said a lawyer of political prominence to us, some time since, "that you doctors do not carry through the various measures which you all think are necessary for the public health. As a class, particularly as a leading class in learning and social influence, you take less interest in politics than any other. Therefore, it comes that when you want to influence a political body they set but small value on your arguments, because you don't count for much in political life."

This is a fact, and it may be of some interest to enquire why it is.

It is, indeed, more prominently the case in the United States, perhaps, than in any other constitutional country, that physicians shun the political arena. European states count not a few medical men of great distinction in the elective bodies. Professor Virchow, the profound pathologist, has just been returned to the Prussian House of Delegates, by 852 votes against his rival's 153. This rival was Court Chaplain Stœcker, while Virchow is a radical and progressionist. Dr. Lœwe is another Berlin political physician, also recently elected by a sweeping radical majority. In Italy, Professor Mantegezza is no less famous as a medical teacher than as a senator and active worker in politics. The names of Trousseau, Nélaton and other eminent French physicians, were equally familar in the tribune and the forum. Those who have studied in the great medical schools of Paris, Berlin or Vienna, must have noticed the much more active interest in politics among the students than in the colleges of our own land.

This difference is partly attributable to our greater political freedom. Politics is more distinctly a career with us than elsewhere, and unless one pursues it as a career, there seems not much more reason for a man interesting himself in it than in any other business not his own. With us, it is not an appeal to prejudice, so much as a discussion and debate, and hence requires study and preparation.

Another reason, doubtless, is that the reading, the daily pursuits, and the private studies of a physician lead him quite away from the sphere of political life. Most of his patients are women and children, and books of science are grandly indifferent to the struggles of parties.

Still further, as the visits of the physician are not to the house of joy, but to the house of mourning, not to the active worker, but to the bedside of the sick and disabled, courtesy and prudence combine to lead his thoughts and words away from the exciting contests of the day, to narrower and sadder interests. The introduction of political disputes at the bedside is in extremely bad taste.

As a mattter of policy, it is as well for the physician to avoid violent partisanship. He can gain few friends by it, and is sure to lose many. Of course, he may entertain very positive views, and support them at the polls, but their expression at other seasons is of more than doubtful wisdom.

Politics, moreover, cannot be pursued with us

with any success, unless considerable time is devoted to it. But there is certainly no business which suffers more quickly from neglect and irregularity in attention than that of the physician. Hence, he is peculiarly debarred from seeking prominence in it.

In some respects it is to be regretted that these things are so. Had we more physicians among our eminent political leaders, many medical and hygienic reforms would be brought about promptly that must now wait years, decades, or generations; yet we cannot say that we should recommend any young physician to include political distinction among his dreams for the future.

BACTERIA AND CHRONIC DYSENTERY.

In a recent number of the *British Medical Journal*, Dr. James Mackie, of Egypt, contributes an interesting article on Bilharzia Hæmatobia.

It seems that the natives of the interior of Egypt are very frequently troubled with an affection of the rectum, presenting at times many of the characteristics of "piles" or "dysentery," and sometimes they complain of "constant pain and weight in the rectum, with tenesmus."

When closely inquired into, these cases do not present the history of ordinary dysentery or hemorrhoids, but rather resemble a mild form of malignant disease.

If the forefinger is well introduced into the rectum, small, soft, but firm nodules can be felt, often very numerous.

These tumors can be easily twisted off with small, hemorrhoidal forceps, and when placed under the microscope, the blood vessels are found filled with the ova of Bilharzia Hæmatobia.

Now, cannot our own chronic dysentery, that proves oftentimes so obstinate, and in many cases so dangerous to the aged and enfeebled individual, be produced by a similar cause?

Every physician in active practice has more than once had under his care old men suffering from chronic dysentery, upon which drugs would have no avail.

We would suggest to those of our readers who are fond of microscopy, that they would find instruction surely, and might be so fortunate as to make a very valuable discovery in pathology, were they to make a rule of carefully examining the evacuations from these cases. A small shred of rectal mucous membrane might be scraped off with the finger nail and placed beneath the microscope; and no possible chance of obtaining a post-mortem upon one dead of chronic dysentery should be neglected.

Let some one tell us that chronic dysentery is caused by the presence, in the mucous follicles of the rectum, of vegetable parasites, setting up and maintaining an exhaustive inflammation therein.

Let us know the nature of this enemy, and some one will soon discover a means for exterminating it.

The strong resemblance between the symptoms of chronic dysentery and this irritation of the Egyptian bowel, would seem to point to the supposition that the former as well as the latter might be caused by the presence of a parasite.

We are not *bacteria-mad*; but we do see great reason for the suggestion we have made, and feel sure that the search recommended will prove beneficial, in a general way, to the searcher, even though he may fail to make the specific discovery.

PILOCARPIA IN BRIGHT'S DISEASE.

The medical journals for some time past have had more or less to report concerning the use of this comparatively new drug in Bright's disease.

Some apparently wonderfully favorable results have been recorded, while again disastrous failure has been the termination.

That pilocarpia has a definite and permanent place in the therapeutics of Bright's disease, appears to be a well established fact, but the exact nature of its position seems to be but vaguely understood.

Let us start out with the general statement that you cannot *cure* a chronic disease that is dependent upon an absolute alteration of the

tissue of the organ involved ; to more specifically illustrate, let us say, that when a certain amount of the tissue of a kidney has undergone waxy, fibroid, or fatty degeneration, no human power or agency can restore it to its original normal composition. Therefore, when such changes have taken place, we must perforce consider the patient afflicted with *chronic degenerative disease* of the kidneys, which, from its very nature, is *incurable.*

But now we are taught by those who have made special study of renal diseases, that this degeneration is oftentimes preceded by an acute disease of the organ, which, passing into the chronic state, becomes incurable.

In the chronic form of the disease, owing to the altered condition of the organ, a part of its ability to perform its duty is lost; in the acute form the same condition obtains.

So, then, we have two conditions of the same disease, the acute and chronic, the one curable, the other not. Now what are the indications for treatment? In the one case you want to cure; in the other you can only palliate.

Remember, that when you offer her favorable conditions, nature always tries to cure, and that the main condition which she imperatively demands is absolute rest of the affected part.

To rest an acutely diseased kidney, you must resort to the well-known compensatory function of the skin. Here comes in the curative action of pilocarpia. If, when you are called upon to treat a case of acute Bright's disease, you will first put the patient to bed and give him sufficient pilocarpia to keep the skin working actively, you will thus rest the kidney and enable nature to return it to its normal condition. This treatment should be continued until all evidences of the disease have disappeared.

In chronic Bright's disease, drugs have but little value, save in emergencies. It is universally admitted that the *hygiene* is of far greater value than the therapeutics of chronic kidney disease. When a man suffering from the chronic disease gives evidence of uræmic poisoning, which indicates that the kidneys have failed to remove a sufficiency of urea, then will the power of pilocarpia prove of great value in forcing the skin to eliminate this deadly poison. In uræmic convulsions hypodermic injections of pilocarpia have been used with most satisfactory results.

Thus, then, we can understand that in the acute disease pilocarpia possesses what may be called curative powers, and that in the chronic form it is a most excellent palliative, and can be relied on in many emergencies. This drug is one of the most active and reliable diaphoretics that we possess, and will therefore prove useful wherever free action of the skin is desired.

CHANGES IN THE SECRETION OF MILK UNDER INFLUENCE OF MEDICINES.

A few numbers ago the Medical and Surgical Reporter mentioned some experiments recently made to determine the influence certain medicines may or may not exert on the composition of the milk, when the drugs are given to the nursing mother. Dr. M. Stumpf has now instituted still more researches in this direction. He made his observations in the Medical Clinical Institute, of Munich, and published his results in the *Deutsch. Archiv f. Klin. Med.* xxx, p. 201.

The investigations were mainly made upon a young goat, the feeding of which was carefully regulated. The influence of iodide of potash, ethylalcohol, lead, salicylic acid, morphia and pilocarpia were employed, and their effect noted concerning quality and quantity of milk; the transfer of these drugs to the milk was also specially examined into. The results were as follows:—

1. Iodide of potash diminishes, salicylic acid augments (probably) the quantity of milk; alcohol, morphia and lead produce no change in the quantity of the milk, while pilocarpia does not enhance the secretion.

2. Salicylic acid augments the percentage of sugar in the milk, alcohol the fatty portion; lead, morphia and pilocarpia leave the milk unchanged in this respect, while iodide of potash disturbs the function of the mammary gland and causes a change of all the parts of the milk.

3. Iodine, united to casein is transferred to

the milk, but the quantity of the drug is subject to individual peculiarities, changing in different animals of the same species. In women the iodine disappears again in the milk as soon as its administration ceases; in herbivorous animals the medicine is found for some time after cessation of introducing the drug into the system, still in the milk.

4. Alcohol is not transferred; of lead, salicylic acid and the other remedies named, only traces were found.

Notes and Comments.

Turpeth Mineral in Croup.

Dr. Fordyce Barker, of New York, places great reliance on this drug in croup. Dr. E. R. Duval, stated, at the last meeting of the Medical Society of the State of Arkansas (*Transactions*), that "For twelve years, after the manner of Dr. B., I have been using the turpeth mineral in the treatment of this disease, and I have, since the adoption of this plan, lost no case of croup.

My treatment has been, immediately upon being called to a case, without stopping to interrogate very closely as to whether I have a croup reflex, catarrhal, or true croup, to administer at once a dose of the agent (from two to five grains, according to age) in honey, syrup, or sugar of milk, and if there is no decided emesis within fifteen minutes, to repeat the dose; and I have never known it to fail to vomit at the second dose; almost immediately a satisfactory response is secured by the first administration. The vomiting is usually free, without effort and without depression. The powder is tasteless, small in bulk, prompt in action, and thorough in effect.

The virtues claimed for it are sedative and revulsive. "It depletes the mucous membrane by an abundant secretion of mucus, which is thrown up; it removes from the larynx, by the forced expiration which it causes, any albuminous or fibrinous exudation which may be there in a diffluent state, and which by remaining may become, subsequently, pseudo-membrane; it acts as a powerful revulsive, and thus diminishes the capillary circulation in the trachea and larynx; and thus it becomes a most effective agent in arresting the inflammatory forces."

If the croup persists after removing the causes of reflex action, then, of course, other therapeutic agencies will need to be essayed; but throughout the attack, be it short or long, whenever the breathing becomes suffocative, from the accumulation of mucus in trachea or larynx, I give the turpeth mineral in the manner and according to the conditions and plan above designated.

The Treatment of Hydrophobia with Curare and with Pilocarpia.

During last month two important contributions to the therapeutics of hydrophobia have been published; one by F. Penzoldt, on its treatment with curare, in No. 3 and 4 of the Berlin *Klin. Wochensch.*, 1882, and one by Denis-Dumont, on its treatment with subcutaneous injections of nitrate of pilocarpia, in the *Gaz. Med.*, No. 24, 1882. We bring the cases as they are reported by Dr. Bernhardt, in No. 32 of the *Cbl. f. d. Med. Wissench.*, 1882, referring our readers, for more details, to the originals.

A boy, aged 11, having been bitten in the lower lip by a dog, became attacked by lyssa on the 11th day. The dog died four days later, but without showing at the post-mortem any characteristic signs. From this may be inferred, that the bite of dogs, even during the period of incubation of hydrophobia in them, or that any bite of any dog has to be considered suspicious. Regarding the period of incubation of this disease in the human being, Penzoldt found that if the bite took place in the hand or arm it was 84 days; in wounds of the face usually 48 days; in the present case remarkably short, 11 days only. Besides the usual well-known prodromic stages Penzoldt considers frequent sneezing as an indication. The case was treated with curare, which, while it acted undoubtedly as a powerful palliative, could not prevent the fatal end.

Dumont's case is as follows: April 16th, of this year, a shepherd, his wife and child, were bitten by a mad dog. The wife died, under symptoms of hydrophobia, May 20th; the boy showed no symptoms whatever. The shepherd was attacked with all the symptoms of hydrophobia (spasms) on May 22; on three successive days, one-sixth of a grain of nitrate of pilocarpia was subcutaneously injected, and the patient totally recovered. Dartigues de Tryol is said to have made similar observations regarding the effect of this remedy.

As a great many remarkable cases, reported in French journals, so this one appears to us somewhat "fishy," and we give it to our readers for what it may be worth, as any contribution to the therapeutics of hydrophobia will be welcome. But we remember that some time

ago very careful observations were made in the celebrated veterinary school of Berlin, regarding the effect of pilocarpia on hydrophobia. It was found to be utterly useless, augmenting, if anything, the disagreeable spasms. It is really a pity, that 99 out of 100 wonderful cures reported in French journals, will nowhere have such effect as in France. *Sapienti sat!*

Partial Resection of the Bladder.

If we are not mistaken, it was Vincent who first wrote an exhaustive treatise on partial resection of the bladder; his work on this subject at least, is well-known. Dr. Ad. Fischer (*Arch. f. Klin. Chir.* xxvii, p. 376), has now made this operation eight times on dogs; five of these cases had a favorable issue. As the details coincide with those of Vincent, we will mention of F's experiments only a few rather important points. He makes use, for the closure of the wound, of a rather peculiar suture, which, to best designate it, might be called an uninterrupted button-suture. He gives, further, the following indications for partial resection of the human bladder with consecutive button-sutures. 1. Injury of the bladder, which cannot possibly heal by first intention. 2. Diverticle of the bladder. 3. Prolapsed bladder-hernia, causing unbearable difficulties, or in case a stone should be present in the prolapsed part. 4. General dilatation of the bladder in a high degree, the cause of which may be removed. 5. Benign and malignant new growths. 6. Diverse kinds of fistulæ of the bladder. 7. Ulcers of the bladder, not to be removed by mechanical treat ment, of whatever kind, and where the endoscope shows the threatening rupture.

We think, he might have added another indication; rupture of the organ due to an injury. Here this operation, if performed in time, would undoubtedly find its most important indication, *i. e.*, if the correct diagnosis is possible.

The Radical Cure of Empyema.

As in every cold climate, so in Riga, many cases of pleurisy took place during the years 1878 to 1881. Dr. J. Hampeln had the opportunity of observing a large number of such cases, and he published the reports in the *Ztschr. f. Klin Med.*, iv., 82, p 248. As a result of his great experience he has adopted the following views:—

He prefers in empyema a broad opening of the pleural cavity and partial resection of a rib, with antiseptic after-treatment. To avoid the dangers of this operation he recommends to make first an incision into the skin, and then to puncture the cavity with a flat, bent trocar, constructed by himself. The best place for the operation is near the fourth or fifth costal interspace. Only in case of putrid exudation he makes use of a five per cent. carbolic acid solution to wash out the cavity. Hampeln sums up his experiences as follows:—

A primary or secondary pleurisy of adults, and following some other acute disease, indicates by itself the formation of a thoracic fistula; only in case of very great exudation and of intense dyspnœa, due to the former, and threatening life, provisional puncture may be had recourse to, as a palliative.

2. The earlier, after the acute stage has passed, the thoracic fistula is made, therefore (from two to three weeks), the more favorable will be the issue of the case.

3. In recent empyema the formation of the fistula by puncture is sufficient; in old empyema, however, or when a fistula is in existence already, generally the resection of a rib is necessary.

4. In empyema of children simple puncture should always be tried first, as a curative agent.

5. The most successful after treatment is an antiseptic occlusive bandage.

The Excretion of Strychnia by the Urine.

There has been, perhaps, no fact which has caused so much dispute as the manner in which strychnia is excreted from the body, and if it is chemically decomposed or not. A few months ago, in Gratz, suicide was committed by strychnia. The attending physician reported that he had found the strychnia in the urine. This led to a dispute in the medical journals.

To decide the question, Dr. J. Kratter (*Sep. Abd. Wien. Med. Wchft*, 8, 9, 10, '82; *ref. Deutsch. Medizinal Zeit.*, Aug. 10, '82) has instituted a number of experiments. He gives, what others have usually omitted, all the details of his investigations, and especially the test employed, which was Dragendorff's method. Urine is acidulated with diluted sulphuric acid, in the water bath boiled down one-half, alcohol added; boiled; when cold, filtered, washed with alcohol and the quantity of fluid narrowed down. The acid solution is then shaken with chloroform, the aq. ammonia added, and the same done with the ammoniacal solution. The other process is the usual one. At last, on a watch glass, concentrated sulphuric acid and bichro-

mate of potash form the reactions. Beautiful violet stripes are noted wherever the latter comes in contact with strychnia.

The results of these experiments are as follows: Strychnia, no matter how introduced, is rapidly absorbed and excreted totally unaltered by the urine. This excretion begins already within the first hour after the introduction of the drug into the system, and is ended, latest, within 48 hours, when the last trace of the whole dose can be demonstrated in the urine. The idea of some, that strychnia was deposited in the liver, is not tenable and neither probable. Any accumulative action may simply be explained by the fact that a new irritant acts on the nerve centres, the former irritation of which had not totally ceased as yet, and equilibrium not having been reëstablished before a new dose disturbs it *de novo*.

Misleading Symptoms of Serious Cerebral Disease.

The *British Medical Journal* reports an instructive case that occurred in the London Hospital. A boy, aged 15, diving into the river, struck his head on the bottom. Upon admission he was dull, semi-unconscious, complained only of headache, and seemed to be suffering from slight concussion of the brain. Rest and ice to head was the treatment. In three days he was well enough to go home, but in the evening (before being discharged) was attacked with severe headache, pupils dilated, no paralysis, and speech became difficult. There was now noticed a slight purulent discharge from the ear. These symptoms increased, and the boy, becoming comatose, died the fifth day after admission.

One of the patients in the ward was told by the father of the boy that a discharge had been present before admission, for which he had been under treatment outside, and also that he had previously suffered for some time with headache. This was the first intimation that the boy had been out of health, notwithstanding inquiries made of the friends.

On *post-mortem* examination, the dura mater was found adherent to the brain posteriorly. In the left parietal and temporal region was a blackened spot covering a large abscess-cavity reaching as far as, though not entering, the ventricular space, and containing a considerable quantity of very foul pus. The temporal bone was necrosed, and pus found between that bone and the dura mater.

The coincidence of the injury and the brain-mischief is obviously of much interest, as, supposing the boy had been allowed to go home and then died, it would have been impossible to convince his friends that his death was not due to the injury, and that there had been culpable want of care.

Pathology of Measles.

The celebrated authority on diseases of children, Prof. Henoch, in Berlin, communicates the following instructive case to the Berlin *Klin. Wochenschrift*, 1882, No. 13.

In a girl, aged 4, the eruption of measles during the first two days was normal; but on the third day (the fever continuing uninterruptedly), all over the body, large vesicles (from the size of a hazelnut to that of a silver dollar) made their appearance, filled with a yellowish serum. The eruption of measles assumed a dark red, hemorrhagic form. The vesicles could be seen, not only over the measle-exanthem, but also on parts of the skin otherwise perfectly healthy. After cessation of the vesicular eruption, on the fifth day, the fever abated, but between the sixth and seventh days the temperature ascended again to over 40° C., and a fibrinous pneumonia in the right lower lobe developed itself, which on the eighth day caused the death of the child. A post-mortem examination was not permitted.

Henoch considers the case to have been one of morbilli complicated by pemphigus acutus, and not, as Stemmer (*Cbl.* 1874, p. 575) contended, in a similar case of his own, as the product of a dermatitis morbillosa developed to the highest degree.

We only wish to remark, that the vesicles should have been examined for bacilli. Not long ago we reported in this journal several cases of diabetic persons, where the sudden breaking out of abscesses was found to have been caused by bacteria. We do not doubt that, from some cause or other, micro-organisms of a special type found their entrance into the circulation and gave origin to the pemphigus eruption. We have further, here, again the proof that two diseases may coexist with each other.

Treatment of Writers' Cramp.

A writing teacher, Wolff, in Frankfort, has described a method to cure writers' and piano-players' cramp. His procedure has been tried and greatly praised, especially by Vigouroux. In a late number of the *Deutsch Mediz. Zeit.* (1882, No. 9), Dr. Theo. Schott contends for himself and his brother the priority. As the method is not known, as yet, in our country, we

will describe the same according to Prof. Bernhardt, in the *Centrlbl. f. d. Med. Wiss.*, 1882, No. 33.

It consists in the combined employment of gymnastics and massage. Gymnastics are first practiced by the patient himself. Once or twice daily he has to practice with his fingers, hands and arms, in the order named, and in such a manner that flexions, extensions, ad- and abductions are carried out six to twelve times, with force; the whole procedure occupies about half an hour. Then the same motions are practiced, but each time inhibited by a second person; this has to be done in a very regular, even manner; this part of the method should also be practiced about twice daily. After this, once daily, massage of the muscles and nerves of the arm is practiced; here the work has to be an ascending one, from the periphery toward the centre (to the plexus axillares and cervicalis), and contusions have to be carefully avoided. During the six to eight weeks of this treatment, writing, piano-playing, etc., have to be totally omitted. The cure seems to be certain and lasting, which is very important, as all other methods of treatment have so far been unsuccessful.

Rupture of Liver.

In the *Lancet*, Mr. Sansome reports the case of a man, aged forty-six, who was admitted into the hospital on account of an injury. He was suffering from severe shock, his features being pinched and sallow, surface cold and pulse feeble. There were no marks of violence about the body, and the conjunctivæ were not discolored. The area of hepatic dullness was somewhat extended posteriorly. Hot fomentations were applied, opium administrated internally and milk only ordered. The day after admission he suffered acute pain and nausea, the shock seemed intensifi d, and stimulants were ordered, but without avail. About 8 P.M. all pain ceased and he expressed himself much better. At 11 P.M. delirium supervened, he rapidly sank, and died at 12.30 A.M. the next morning. The autopsy revealed a large quantity of clear, bloody fluid in the abdomen and on the posterior border of the right lobe of the liver a gaping, jagged wound, three inches in length and one inch in depth at the center. Three inches anterior to this was another wound, two inches long and about one-twelfth of an inch deep. The gall bladder and duct were uninjured. The patient lived thirty-six hours after the receipt of injury.

Treatment of Contracted Finger.

In the *Lancet*, Dr. Edward Bellamy describes the case of a powerful man who some months ago scratched his little finger with a meat-bone. The usual train of symptoms followed, and when he saw him the tip of the little finger was so tightly approximated to the palm that no force could separate it, and strong fibrous bands corresponding with the primary flexures were readily observed. He divided the bands with a von Graefe's iridectomy knife, and extended the fingers forcibly. No good came of this proceeding. He subsequently placed him under an anæsthetic, and carefully and thoroughly extirpated the entire cicatrical tissues, and divided the tendon, with antiseptic precautions. The finger was carefully retained in the straight position, a metal circlet was made for the wrist, and a piece of stout steel clock-spring welded on to it. This steel spring was carried up the dorsum of the finger and suitably attached to it. By its tension it effectually kept the parts on the stretch, and when the wound had healed, passive and active movements, conducted by the patient himself, brought about an excellent result. The finger is as straight as the others, and will be, no doubt, ultimately quite as useful.

Action of Kava.

The natives of the Figi Islands prepare, out of the root of Piper Methisticum, an infusion, which they call *kava*. They prefer the old, dried root, as the fresh root has a disagreeably acrid and bitter taste. The root is worked with water to a pulp and filtered, a cold infusion therefore, and appears then as a turbid, brown fluid, which is refreshing and stimulating, very similar to coffee. It has, besides, a constipating influence, and the over indulgence in it is said to cause enlargement of the liver. Dr. L. Kesteven (*Practitioner*, 1882, p. 199), who has specially investigated this remedy, speaks of a decidedly favorable action of the drug in disturbances of the genito-urinary organs, especially in chronic gonorrhœa, and in chronic cystitis it is said to be almost a specific, and has been used as a remedy in the former disease for many years, with success, by the natives, who rarely, in such cases, have recourse to civilized physicians, but who cure themselves by this drug, which is taken only internally. They live first on a mild diet, take something to purge, mostly Glauber salt, and then, when the acute stage is passed, employ kava. Ten to twelve days is the usual duration of a case of blennorrhœa, with them.

Transient Albuminuria.

As many others, Dr. Kinnicut (*Centralbl. f. d. Med. Wisch.* 33, 1882, ref. by Senator from *Arch. of Med.* 82 vii, 1), has frequently found in apparently perfectly healthy persons of youthful age, and without any disease whatever having preceded it, albumen transiently in the urine. But what is interesting, he noted at the same time a very strong excretion of oxalic and uric acids. He thinks that the cause is, that transiently a large quantity of imperfectly oxidized, nitrogenous material is present in the blood, and that there exists also a vasomotor disturbance, especially in the kidneys, producing the excretion of these products of abnormal digestion. Dilatation of the blood vessels and slowness of the circulation of the blood may also cause a transient disturbance of the epithelium of the glomeruli, a view Heidenhain first expressed. He finds the proof for his assertions in the occasional presence of albuminuria, oxaluria and lithuria ("sediment of urates, lithates), in nervous persons" and under nervous conditions.

How he explains his transient presence of "a large quantity of imperfectly oxidized nitrogenous material," etc., he omits to say; a well-known way of escaping an explanation of something we do not know. But this is the pivotal point of the whole, the *omnium causa* here.

Blue Marks and Pediculi.

The *Lancet* says that some years ago, a French naval surgeon, M. Mowson, pointed out the fact that blue or dusky spots were often found associated with pediculi pubis. Subsequently, M. Duguet succeeded in producing these blue spots by inserting beneath the epidermis a small quantity of a sort of paste made of bruised pediculi. Further observations by M. Mallet, make it probable that the substance producing these spots is contained in the salivary glands. By means of fine forceps, the head of a pediculus was torn off and inserted beneath the epidermis of the fore-arm and near it the rest of the louse was similarly inserted. Next day a blue mark was distinct around the body of the insect, but not around the head. In another experiment a small mass came away from the body of the insect with the head, and in this case the dusky spot developed around the head and not around the body. Further experiments showed that the coloring agent was situated in the body opposite the anterior pair of legs, and at this level it is known that there are two pairs of salivary glands. M. Duguet has pointed out some curious facts regarding the resistance of some persons to the action of the salivary juice and the influence of season on the coloring power of the insect. The blue spots are far more abundant in February, March, and April than in other months.

Correspondence.

A Query About Cowpox.

Ed. Med. and Surg. Reporter:—

Was cowpox communicated to cattle by smallpox virus, or is cowpox a disease as original and peculiar to cattle as smallpox is peculiar to the human family?

"Cowpox is a disease of the cow, arising spontaneously." Dunglison.

This, according to "Webster," would indicate that the disease occurs in cattle without being planted, or inoculated; proof of this is perhaps found in the following:—

Dr. Jenner first caught a glimpse of this great truth (vaccination), which he thoroughly investigated, among the expiring embers of that epizöotic disease (cowpox) which laid waste the herds of this country toward the end of the last century." Aitken.

Cowpox does not occur in the human being except by inoculation, nor does it, when communicated by inoculation, prove fatal to the human family. This latter fact compared, then, with the fact that herds of cattle were laid waste by the disease, it seems to me, would indicate that the soil or system peculiarly adapted to the disease, and in which it may be really at home, is that of the cow and not the human system. Another fact which would indicate that the natural conditions of system for cowpox is not the human system, is the deterioration of the cowpox virus when propagated successively in the human being. And now, if cowpox had once been smallpox, would not bringing the disease in the form of cowpox back into the systems of human beings have a tendency to render the virus, by often repeated vaccinations from person to person, more effective, rather than to deteriorate it. This it seems to me is some evidence that cowpox probably never originated from smallpox.

Smallpox may be communicated to cattle by inoculation though not without some difficulty. It is said instances are on record where the disease was communicated by covering cattle with sheets upon which smallpox patients had lain. Also by cattle grazing where bedding infected with the disease had been spread from time to time, and other instances, and many if not all (except the inoculations) were perhaps genuine cases of cowpox, occurring accidentally in a vicinity where smallpox existed. Smallpox when propagated on the cow, like cowpox when propagated on the human system, loses its virulence. Here is another evidence in favor of cowpox never having originated from smallpox.

The diseases are similar, but I believe not just identical. If they were properly identical, there would be no deterioration by transmitting cowpox to human beings, and vice versa.

Deterioration is the rule where cowpox is propagated on the human system; deterioration is the rule where smallpox is propagated on the cow; no deterioration of virus or disease where cowpox is propagated on the cow. No deterioration where smallpox is propagated on the human being, all things and conditions being equal. Nothwithstanding all these facts, such authorities as Meigs and Pepper say the vaccine disease is an affection produced by the inoculation of the virus of variola, modified by passing through the cow. The proofs which exist as to the truly variolous nature of the vaccine disease in the cow are altogether incontestable, so that we must regard the vaccine disease in the human subject merely as a remarkably modified form of variola.

Now these are excellent authorities on diseases of children, but may not they err? "To err is human." In appearance does not the severely typhoid condition of various diseases closely resemble the specific typhoid fever, and yet they are very different diseases."

"Bartholow," in speaking of vaccination, starts out by saying vaccinia or cowpox is a natural disease occurring in the cow and horse, and possibly some other animals. This means, according to "Webster's" definition of "natural," *not acquired*; he, however, ends the chapter in this wise; the vaccine disease may be produced by inoculation with lymph taken from other cows suffering from the disease, with the lymph of horsepox which is identical with the cowpox, with humanized lymph or retro-vaccination, and by the matter of smallpox or variolation. The latter process has given origin to a good deal of controversy, owing to the difficulty of inoculating cows with the matter of variola, but it has been accomplished a number of times. The results being in all respects the same as ordinary vaccinia, so that the vaccine disease as Jenner, originally maintained, is variola modified by transmission through the system of the cow.

In a few words, it may be said Bartholow, in a chapter of little over a page, starts out by saying the disease cowpox is not acquired, and ends up by saying it is acquired; and now, if such good authorities leave matters in such an unsettled condition, why do they do it? is it because they have no positive proof (though they assert they have)?

If it is possible for smallpox to have previously occurred in the human being, then it is also possible for cowpox to have previously occurred in the cow.

The occurrence of smallpox in the human family (spontaneously) is perhaps settled.

As a suggestion: I offer this that it might interest some of the readers of the REPORTER to have proprieters of vaccine farms state, through your journal, whether their stock of virus is propagated from supposed genuine cases of cowpox, or whether it is knowingly propagated from inoculation of variolous matter communicated to the cow.

H. L. GETZ, M.D.

Marshalltown, Ia.

NEWS AND MISCELLANY.

Vaccin Charbonneux.

In our issue of November 4th we gave the results of Dr. Klein's experiments with vaccin charbonneux. His observations were reported to M. Pasteur, who, in turn, writes as follows to the *British Medical Journal*:—

"I am much obliged to you for having informed me of the result of Dr. Klein's experiments on *vaccin charbonneux*. These experiments suggest to me the following reflections: The discovery of a means of producing modified virus, and the efficiency of the practical use of such virus in all matters relating to *vaccin charbonneux* have been so thoroughly proved, in various countries, for at least a year, that there is nothing more to be done, in the way of demonstration, to settle the question. It is an accomplished fact that now belongs to science.

"If any experimenter, however competent he may be, and I know that Dr. Klein is very able, fail when he attempts a fresh verification of the question, his duty, in the present condition of science, should be the investigation of the motives by which he is opposed. I have already pointed out that the question of species and race should be taken into consideration. A vaccine which vaccinates rabbits, vaccinates sheep very badly, or to a very small extent. Some breeds of sheep do not tolerate at all, or tolerate very badly, the vaccine which is efficient for another breed. It is advisable that preliminary trials should be made on a small number of individuals, especially if we pass from one country to another, so that we may be assured of the degree of strength of the vaccine: and if it be desired also to find out what is suitable to new species or varieties, mice and guinea-pigs cannot be used for the trial of sheep-vaccine. There are also in the kind of experiment under consideration other sources of possible failure. Thus, I have already pointed out that in one of the experiments undertaken in Italy, the virulent virus employed was septicæmic as well as anthracic. The vaccinated animals died as well as the non-vaccinated subjects.

"Dr. Klein has, as it appears to me, equally failed in proving that *vaccin charbonneux* loses its virulence when cultivated at 42° to 43° Cent., in contact with the air; this is because he has not followed the method pointed out by me, and here also he can only blame himself for his failure. The conclusion of the communication to which I am now replying is prudent to the last degree, for it is certainly most unadvisable to introduce *vaccin charbonneux* into a country where anthrax does not exist."

Professor Pacini on the Claims of Harvey.

A dispute has been lately taking place between England and Italy, as to who really discovered the circulation of the blood; some Italians claiming this honor for Cesalpino, while the English, of course, claimed the discovery for Harvey. The matter seems to be definitely settled at last, by the following letter from the eminent Professor Pacini, of Florence, to Pro-

fessor Johnson, of London, which we take from the *British Medical Journal*:—

"I have read, with the greatest pleasure, your beautiful dissertation (Harveian Oration), respecting the great discovery of the circulation of the blood, which you have been pleased to send me; and, having read it, I am bound to acknowledge that the glory of having demonstrated that discovery by every kind of argument and of fact belongs unquestionably to Harvey. You ought not, however, to wonder that actually the most clamorous of the scientific Italians endeavor to attribute the discovery to Cesalpino. If Cesalpino and Harvey were now living, it is certain that our scientists would consider it a duty to attribute it to Harvey; but both being dead, it is natural that Italian scientists should attempt to claim it for Cesalpino."

Professor Brinton's Tribute to Professor Gross.

In the course of the Introductory Lecture to the Winter Course in the Jefferson Medical College, Professor John H. Brinton said, "It has happened that one who for long years has worn, with singular grace, the robes of professional office, and who for more than a quarter of a century has been alike the pride and ornament of this school, has felt that the time has come when, with every propriety, he may retire from the active duties of his chair, and permit himself that relaxation which advancing years and the sense of duty well performed, justly entitles him to demand.

"Gentlemen, it is not often that a man can so live, prominent for learning, worth and purity, as to forestall the judgment of posterity; it is not often in our profession that contemporary tongues roll up the shout of *αναξ ανδρων*, king of men; it is not often given to living man to pluck the chaplet of immortality and wear it on a mortal brow. Yet all these have been graciously granted to one whom we hold dear.

"All honor, then, to him of whom I speak, whose honors need no roll call; to him, the wise physician, the illustrious surgeon, whose fame is world-wide, and to whose books learned men in every country turn; to him whom royal lips have told that in honoring him Great Britain's august University had honored itself; to him, so long the standard bearer of the American profession; to him, the glory of our school, our own beloved and venerated GROSS."

Typhoid Fever in Paris.

Typhoid fever, which may be said to be almost endemic in Paris, has arrived almost to the proportions of an epidemic since the month of June.

The number of deaths from the disease was 161 for the first week in June, and 273 in the last week.

Again, from September 22d to the 28th, there occured 57 deaths, and from September 29th to October 5th, 134 deaths, while in the corresponding weeks of 1881, there occurred respectively 21 and 27 deaths from the disease.

There are at present 2074 cases of typhoid fever in the Paris hospitals; at the Lariboisière hospital alone there are 437 patients. On the two days, October 10th and 11th, 283 cases were admitted into the hospitals. The epidemic has assumed such proportions that most chronic patients have been removed, and barrack hospitals erected at Cochin, St. Louis, etc.

The Cause of the Death of Gen. Anthony Wayne.

The following we take from the *College and Clinical Record*:—

The following scrap of history will be of great interest to medical readers; it is an extract of Henry De Butt's letter announcing the death of General Anthony Wayne, addressed to the Secretary of War, and dated at—

PRESQUE ISLE, December 15th, 1796.

"It is with extreme concern I discharge the melancholy duty of announcing to you the death of Major General Anthony Wayne, who, after an exceedingly painful visitation of the gout, expired this morning, between the hours of two and three o'clock. This disorder attacked him about the 17th ult., during a very favorable passage from Detroit hither, where he arrived on the evening of the next day. It by turns affected his feet, knees and hands, with considerable inflammation and a great degree of pain, until about the 3d; when the violence of both beginning to abate inspired flattering hopes of his speedy recovery; but, alas! these were of short duration; for, on the morning of the 3d inst. it appeared that the gout had taken possession of his stomach, where it remained with unconquerable obstinacy and extreme torture, until it put a period to his existence. His remains will be interred to-morrow, within this fort, with military honors."—*Claypoole's American Daily Advertiser December* 31st, 1796.

American Academy of Medicine.

At the recent meeting of the Academy, held in this city, fifty-one new members were elected.

Personal.

—Dr. Philip Leidy has been removed as port physician of Philadelphia, and Dr. Thomas B. Reed has been appointed in his place.

Items.

Errata.—In our issue of Nov. 11, p. 559, line 32 from bottom, for "I have seen used," read "I have *not* used"

—Dr. W. T. Belfield, of Chicago, will deliver the Cartwright course of lectures in New York the coming winter.

—Dr. J. W. Bean, of Cottage Grove, Lane Co., Oregon (graduate of Jefferson Medical College), has been appointed by the Government, physician in charge of the hospital at the Cascades (Cascade Locks, Wash. Co., Oregon).

QUERIES AND REPLIES.

W. S. D., Pa. We have been informed that the constituents of Pierce's Favorite Prescription were ascertained by Hager & Jacobsen, eight or ten years ago, as follows: savine, agaric, cinnamon, cinchona bark, opium, gum arabic, oil of anise, alcohol; quantities were not given.

THE

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Original Department.

Communications.

TWO INTERESTING CASES OF JUVENILE CONVULSIONS.

Read before the Macon County (Mo.) Medical Society,

BY A. T. LEVICK, M.D.,

Of Woodville, Mo.

On February 14th, 1880, I was called, in a hurry, to see a boy aged 5 years, said to be dying. This boy's history, in brief, is as follows: Was born apparently a healthy child, from healthy parents. When two weeks old, he lay for three weeks in a partially comatose condition, with spasmodic jerks and twitching on one half of his body; he finally got better, but all his life he has been subject to convulsions at times, coming on apparently without cause, and always accompanying any fever he might have. For the last few months he has been in fair health, but has an enlargement of the spleen which seemed to cause him no trouble, and was not treated; the child, although apparently bright, had never talked and had been more or less troubled with worms, which were easily expelled with calomel and santonine. The present attack commenced some time in the night previous to my being called in, the mother being awakened by the child apparently choking and struggling for breath, being black in the face, to use her words, and suffering from a general convulsion, with spasm of the glottis, which made the mother think (who by the way is not overly bright) that the child had a sore throat, to which she directed her domestic remedies, honey and vinegar, pepper tea, etc. The child would have a fit, she said, every five minutes, and would be cold as ice one minute and as hot as fire the next, had a very sick stomach and vomited frequently. This state of affairs continued till between 1 and 2 P.M., when the child's right side (arm, leg, eye and corner of the mouth) was attacked with a jerking, not very fast, but continuous.

I arrived soon after this time, and found the child lying in a cradle, surrounded by several distracted old ladies and the grief stricken mother. The child was lying still and breathing naturally, face rather pale, eyeballs both turned as far in one direction as the recti muscles would allow; pulse was discernible but not countable, from weakness, and quickness; while examining the child, but two or three minutes, there commenced a general spasm of the right side of the body and face; pupils largely dilated. I had the child's head pulled from over the cradle, put my handkerchief over its face, and poured half a gallon of ice water on its head from a slight elevation, but saw no improvement. The patient could not swallow. I had no chloroform or rectal syringe. I then ordered a tub of hot water, put in some mustard, and set patient therein, bathing his body and lower extremities, at the same time keeping ice to his head. The jerking of his right leg kept the water in a perfect commotion; saliva would gather in his throat and mouth, so that we would have to hold his head, that it might run out. After keeping the child in the bath for about five minutes, took him out, wiped him dry, rolled him up in a blanket, but still the spasm kept up. It had then been on perhaps half an hour. I was about at my wit's end; I

could scarcely detect any radial pulse, and then only by bracing cradle against leg with one hand as I searched for pulsation with the other, as the spasm shook every part of the patient; but still there was but one side in convulsion, and that seemed to be internal as well as external, affecting the voluntary as well as the involuntary muscles. The parents had got the child to swallow a good dose of castor oil and turpentine, which acted now copiously; but there was no change. At this stage I took the temperature, for the first time, in both axillæ, and I found it 103 on both sides. I thought now I had the key to the thing; reduce that temperature and you will cure that spasm. So I took a sheet, wrung it out of tepid water, and wrapped up my now naked and still jerking patient. I was still applying cold to his head, and several times would cover his face with a handkerchief and pour on from a quart to half a gallon of ice water. I now cut off his hair and had his scalp continuously rubbed with ice. After patient had been in the wet sheet, which I had frequently sprinkled with cool water, for about ten minutes, I had him taken out, wiped dry, and wrapped up in a blanket. In a few minutes I again took his temperature, which I found reduced two and a half degrees, or to 100½. I had several times tried to give patient a solution of bromide of potassium, but did not know that he swallowed one drop. Still no abatement of the spasm. I then sent a messenger for a syringe and some hydrate of chloral (forgot to send for chloroform). While messenger was gone, and after a continual spasm of one and a half hours, it gradually nearly ceased, but only for about three minutes, then patient could move his eyes, and apparently noticed when called. But in about three minutes I noticed his eyeballs drawn to one side, his mouth begin to draw, his arm and leg to jerk as hard as ever (having never stopped entirely). In this short lull I still kept ice to his head, feet wrapped up in hot cloths, as they were getting cold; pulse at wrist at times not discernible. In a short time patient began to sweat on forehead, a rather cool, clammy sweat; extremities and end of nose cool; it looked as if death was imminent.

When the syringe arrived I took two ounces warm water, 25 grs. bromide potassium, and ten grs. of hydrate of chloral, and injected up the rectum, where it was retained. In about twenty minutes or less patient's jerking partially ceased, that is, all but the fingers and toes; his eyes would roll from side to side and apparently follow a person, but still he made no signs that he could hear when spoken to. I had told the attendants that patient would probably be paralyzed on that side of the body, which proved to be the case. Pinching him or tickling the bottom of his foot was not noticed on the affected side, while on the other side he was extremely sensitive. Pupils would not contract when a strong light was brought in close proximity to them, but kept largely dilated. Pulse was now tolerably strong and about 130, temperature 99½°; patient could not yet swallow, and his mouth had to be wiped free from saliva, to keep him from choking. As I could not stay any longer with the case, I ordered perfect quiet until he could swallow, when he was to receive, every two hours, four powders of calomel, santonine and quinia, with a teaspoonful of a solution of bromide of potassium between each dose. Should he not be able to swallow, and spasm return, to repeat injections of potassium and chloral, ice wrapped in a cloth and constantly applied to head. Left the case at 6.30 P.M.

Feb. 15, 8 A.M., messenger informed me child was still alive, had had no more spasms, was able to swallow, and had slept pretty well during night. As bowels had not moved I ordered a good dose of oil and turpentine. 9 A.M., saw the child, who was asleep; temperature 99°, pulse 130 and weak; pupils, while asleep, contracted, while awake well dilated; could move hand or foot on right side but little; seemed to be easily aroused and to know what was said to him; would take an object with his left hand, and try with his right, but he could not close his fingers. At 10 A.M., two hours after giving oil, gave an enema, which passed at once, with some little fecal matter and one large, round worm. I then left two more powders of calomel, santonine and quinine, to be given every two hours, followed in six hours with oil and turpentine. After taking calomel and santonine, I gave quinine every two hours, with a teaspoonful of a solution of bromide of potassium as needed. Head to be kept cool.

Feb. 16, A.M. Patient apparently doing well; no more spasms, but some trouble in deglutition. Temperature 98½, pulse 120; bowels moved this morning, when he passed several worms. He rested poorly during the night; he can walk a little by being held up; while laying in cradle is continually throwing his left leg over his right. The boy gradually recovered, after taking two more doses of santonine, tonic doses of quinine and bromide, to control restlessness. He was a month before he could use his right arm and leg. Since that time he occasionally has a convulsion, but not so severe or often as

he used to, and is now able to talk a little better. This was the hardest and most protracted case of convulsions I ever saw or read of, and, from its history, it must have been caused first by worms, and secondly by a temperature five degrees above normal.

One other case I have just seen was somewhat similar. June 7th, this year, was called to see a child, six months old, of Mrs. T. R's. It had always been healthy, and was the fattest little baby you ever saw. It lay in its cradle, surrounded by its heartbroken aunts, grandmothers, and all the old ladies for a mile around. I was met at the door by its mother, with the exclamation, in agonized tones, Oh, Doctor, my baby has got the croup and is dying. There was gurgling respiration, from the accumulation of mucus in its throat, and I noticed its left hand and leg jerking. I asked how long it had been jerking that way. They said about two hours. I asked if it had anything like a fit before it commenced jerking on one side only? yes; did it froth at its mouth? yes; was it pretty hot? yes; how was it yesterday? it was all right till evening, when it was funny, and had a little fever; how was it the day before? just about the same, only not so bad. Did you notice it cool any to-day? yes, it was right cold about two hours before this jerking commenced. Pulse was going at the rate of about 200 per minute; could not count it. The child felt rather warm. I put my thermometer in its groin and up it went to 105. This child could yet swallow. I gave it some bromide and about half a drop of tincture aconite. Stripped the child and wrapped it up in a cold, wet cloth, frequently sprinkling it with cool water; took it out in about fifteen minutes, wrapped it up, after drying it, kept cold applications to its head, gave it another dose of bromide, and in about ten minutes spasms ceased; temperature now 103. Put the case on a couple of doses of calomel, followed by quinine, to be given every two hours; the bromide and aconite to be given between each dose, as long as fever was high.

The next morning, June 8th, temperature 100; pulse 120; child drowsy, but could be aroused. Had another one-sided spasm during the night, which was of short duration. The child was perfectly paralyzed on one side, but nursed heartily. Gave two more doses of calomel and continued quinine and bromide, discarding aconite.

Evening, June 9th. Since I had been there the child had several one-sided spasms, and while I was examining it I noticed, first its eyes drawn to the left, then its mouth and cheek, then its left arm and hand, and at last its leg. It would rattle in its throat, and frothy saliva would run from its mouth. This was the kind of spells they said it had been having. This lasted about five minutes. Temperature 99°, pulse 120, regular; respiration 36, regular; face pale; could not use its leg or arm, and would not move its foot by tickling the bottom, but would flinch a little from the prick of a pin. I could not account for these spasms now, from the temperature, but judged there was serous effusion in the right hemisphere of the brain.

I kept child's head cool, bowels open with calomel, and put the case on iodide and bromide of potassium, and an occasional dose of quinine.

In about a week I heard that the child was in apparent good health but still could not use its left side.

June 28th. Child was brought to my office, and upon examination I found its temperature 99, pulse 100; nothing abnormal about the appearance of its head; posterior fontanel closed, anterior considerably opened, but appearing natural; nothing abnormal about its eyes, both pupils being equal, and no strabismus. Child was and had been quite fretful, and at times was said to have some fever; it ate and nursed as hearty as usual. Sensibility on its left side considerably diminished, but would flinch some on the stick of a pin or by tickling the bottom of its foot. But there was nearly a complete loss of mobility in both arm and leg, and it would bear no weight on affected leg; would try to hold an object in its affected hand, but could not flex its fingers. I used the faradic brush with a weak current to its limbs, but could use considerable power before it would appear to notice it. I fancied I could see a little improvement after the use of the battery. I put the case on tonic doses of quinine and strychnine, with bromide and chloral hydrate, as needed, to control restlessness.

Now to what can we attribute the cause of this hemiplegia and former unilateral convulsions? They are but symptoms, what is the disease? It is a lesion of some nerve centre. It may be functional, from some reflex cause, or organic, from clots of blood, effusions, tumors, inflammations, or softening. Any lesion in the continuity of a nerve will produce paralysis; also will any disturbance of the periphery or extremities of nerves; this is generally local in character.

—Prof. Nothnagle has now definitely assumed his duties as Professor of Special Pathology, Therapeutics and the Medical Clinic, at the Vienna University.

PRACTICAL CONCLUSIONS WITH REFERENCE TO ABSCESSES.

BY G. HALSTED BOYLAND, A.M., M.D.,
Of Baltimore, Md.

A pursuance of the subject of suppuration would as naturally lead to that of abscesses, as the physical and chemical course of suppuration in the human body brings about their formation. The definition is drawn when a cavity is filled with or made by the formation of pus, in distinction from suppurative infiltration, which is sharply and technically defined by a collection of pus in a natural, already existing cavity—such as a joint, or the thorax. I am speaking only a word, it is true, with regard to abscesses in general. Nevertheless, it is intended to have more especial reference to those that are developed from an acute inflammation, occurring on the spot where they are seated, as well as to those so-called cold abscesses. The sinking or congestion abscesses which appear at a place further from or nearer to the source of suppuration, not unfrequently, in diseases of the bone, claim really only a technical distinction, belonging essentially to hot abscesses. The same may with equal truth be affirmed of the metastatic abscesses that accompany pyæmia. The subject of abscesses, perhaps, at first glance would seem to be of rather secondary consideration, as belonging to minor surgery, as being quite common and generally unfraught with danger. But a moment's thought cannot fail to convince even a superficial observer, that the study of abscesses is one of the most important and most interesting in all the domain of surgery, and the more so, as they belong to the most frequent of surgical diseases. Their diagnosis (by no means always easy) and their treatment, at times very difficult, merit, therefore, the attention of students and practitioners, both young and advanced, general and special. In order to prosecute the study of abscesses successfully, a knowledge of their anatomical conditions and natural processes is necessary. These may be briefly summarized as follows: 1st. *Seat.* Abscesses can form in all tissues; they have even been observed in blood coagula (plugs of blood). They can form at any depth; although I have oftener found them nearer the surface, than in the depth of an organ. 2d. *Form.* Every abscess has an inclination to a spherical form, and for this reason, that, as a general rule, they are equally, at least on several sides, compressed by tissues of the same consistency. Of course, the form varies at times, now being like a long, deep pocket, and again with several shallow cavities connecting or separated. 3d. The number of the abscesses is sometimes very great in one and the same body; in this case, the formation of abscesses generally rests upon an internal cause. In most cases, however, only one abscess is found, or at most, only a few near each other.

4th. *Direction.* Abscesses have, under all conditions, and no matter where situated, the tendency to enlarge toward the surface of the body. This has its explanation in the greater difficulty which the more tense tissues in the depth offer to its further progress in their direction; nevertheless, further progress and breaking through into a serous sack may be possible. There have been examples of this. The son of I. L. Petit died from the breaking through of an abscess into the cavity of the breast; in such a case the saving of life is no longer to be thought of.

5th. *Construction.* Ordinarily the cavity of the abscess is lined with a characteristic pseudo-membrane, which Delpech accepted as constant in all abscesses, and named, accordingly, membrane pyogénique, abscess membrane. This, however, is not found in very freshly formed abscesses and can also be totally wanting in those that have existed longer, as, for instance, in diffuse phlegmon, and it is of itself understood, that it is not a necessary accompaniment of suppuration, being rather the outcome of a collection of pus. It goes through different modifications, according to the quantity and quality of the pus, more especially as to whether the abscess-cavity communicates with the air or not.

Termination of Abscesses.—Pus being regarded as a diseased formation and foreign body, relatively speaking, cannot remain very long in the human body; causing, like other foreign bodies, a more or less pronounced inflammation in its surroundings. This inflammation induces ulcerative processes, resulting in the abscess breaking through the skin and emptying the pus without. The collection of pus in an abscess can also be removed in another way, although much rarer, namely, by absorption. The abscess membrane is made, by some authors, the organ by whose means the absorption of pus can take place, in a manner harmless to the organism. The fact is that an abscess can empty itself without an opening, and then nothing more remains for us but to accept that the pus has again been taken up into the vascular system.

When resorption of pus takes place in an ab-

scess it is noticed that its volume becomes smaller and its contents thicker. Such a change can go on from one day to another, in the most marked manner. First the pus serum is effused. The pus corpuscles then appear to approach their solution by a transformation of their contents into fat. At least, long before the microscope was used to throw light upon pathological process, it was observed by Dupuytren, and others, that, without doubt, abscesses containing pus, after resorption of the pus-serum, can change themselves into cysts containing fat. This fat has been found to resemble fat-wax, which sometimes develops itself in dead bodies—adipocere.

This fat can likewise later on be resorbed itself; finally, the abscess membrane is pushed together by the surrounding parts and reduced to a fibrous layer, which is not unlike an inscriptio tendineæ. An external and visible impression may remain in the place where the abscess was healed by resorption, but this, by good nutrition, will afterwards fill out with fat. There is, therefore, in this resorption, no fear of pyæmia, for it is a question of resorption of pus serum by secondary formation, in which the pus corpuscles undergo a fatty solution, there being no reception of pus pure and simple into the blood through the porous coats of the vessels. When resorption does not follow, the abscess either empties itself within or without by ulcerative process, or is emptied by mechanical procedure without. The contact with the air, as soon as the latter takes place, causes a reddening of the abscess membrane; it swells, the flow of pus becomes richer, and there undergoes a qualitative change. Besides the already mentioned breaking through of abscesses without or into a serous cavity, there is also a third possibility to notice, viz., the breaking through of an abscess into an intestine covered with a mucous membrane. Such a circumstance presupposes the adhesion or growth of the outer surface of the intestine to the walls of the abscess. Although this is certainly, in general, less favorable than an emptying at the external surface of the body, yet there are cases in which it appears desirable; in abscesses of the iliac fossa, an opening into the colon is a fortunate termination; the case is similar with deep abscesses of the parotid, in which a breaking through externally would cause apprehension as regards a fistula remaining behind, while opening into the cavity of the mouth is not followed by any evil consequences.

On the other hand, breaking through of an abscess into the middle portion of the intestinal canal is very dangerous to life, the more so the nearer the stomach, as the presence of pus interferes with the digestion, and the pus has a long distance to go before it can be removed out of the body. When no other unforeseen evil circumstance occurs, and the cause of suppuration is removed, filling up of the abscess cavity begins with the emptying of pus. This filling up takes place by granulation. When this runs its course normally, cicatrization finishes the physico-pathological process.

Diagnosis.—Samuel Cooper said, most justly, "Nothing is more calculated to make known the sharp and experienced coup d'oeil of a practitioner than the facility with which he recognizes deeply-seated collections of pus; nothing, on the contrary, can so easily shake confidence in him as an error made in this respect."

With heat, swelling, pain, redness and *fluctuation*, our diagnosis, in very many cases, is complete. *Fluctuation* is the decisive point. It is the most certain sign of the presence of pus, being determined by a sensible movement of liquid matter in the tumor (swelling), when struck gently or suddenly compressed for a few seconds. The best way to determine fluctuation is to use both hands, placing one opposite the other on the swelling, and then push, with the open fingers kept close together, the sides of the swelling alternately toward each other. In this manner the contents will often be felt to beat against the sides, and thus fix a diagnosis. Very little difficulty is thus experienced, provided always the abscess can be got at. It is, however, at times not easy, and, indeed, fluctuation may be wanting entirely. This can occur from the consistency and thickness of the parts covering the abscess, from too great a consistency of the pus, and finally, from the abscess being overfilled with pus, and thus producing hard, stiff walls. A strong cathartic, by causing a partial resorption of the pus, often leads us to feel the wanting fluctuation. On the same grounds fluctuation may fail in ascites, in hydrops of the joints, and in hydrocele. As regards the consistency of pus, with reference to feeling fluctuation, there are organs in which always only very thick pus forms. For this reason, abscesses of the liver, even when situated near the skin, are difficult to diagnose. Broad superficial abscesses, for instance, such as form from a diffuse inflammation of cellular tissue, have no, or at most very indistinct, fluctuation, on account of being spread out in a thin layer.

In spite of all technical rules, the most experienced surgeon cannot sometimes discover fluctuation, while other signs point to the presence of an already completed formation of pus. Here belongs first œdema, the tough, spongy swelling which especially leads us to suspect the beginning of suppuration in the extremities, and which in inflammations of such parts as are surrounded by fast fibrous skins is never absent as soon as they go into suppuration. Further to be noticed are, the etiological conditions, the duration of the inflammation, the texture of the inflamed tissues, the constitution of the patient. The pain, which during the inflammation was spanning or sticking, becomes commonly throbbing, the patient feels often a beat in the abscess isochronic with the beats of the pulse. If fever has already developed itself there are formications or chills.

Among the tumors with which abscesses can be confounded are, particularly, aneurisms. These are tumors with a cavity containing blood, this cavity communicating with an artery. Among them those aneurisms that develop themselves from inner causes (without a wound preceding) are the ones that give rise to such a mistake. To avoid this the following points must be strictly observed: An aneurism forms at first a soft tumor, that in part or entirely disappears upon pressure.

As a distinguishing mark here, the abscess is of harder consistency and less impressionable, the younger it is; in the first stages of its development it is quite impossible to diminish it in the least by pressure. In the further course the relations change, the abscess becomes soft, the aneurism becomes hard, and this change in the consistency in abscesses is most marked on the summit or point, in aneurisms at the base. Arrived here, we can make a correct diagnosis in most cases, for the rhythmic arterial pulsation of an aneurism is absent; we say in most cases, not overlooking the fact that certain abscesses form with a pulsation so like that of an aneurism as to perplex the most experienced. The pulsations, then, that can be felt in both tumors, merit an especial consideration. An abscess often has its seat in the inter-muscular spaces, filled up with connective tissue, in the depth of which the larger arteries run; the abscess can, therefore, by the pulsations of the artery or arteries, rise and fall isochronic with the beats of the heart. But we have here to do with an impulse given to the tumor, which can only be felt distinctly on that side lying nearest the pulsating vessel, and which, by pushing aside, if this can be done, can be at once arrested. On the other hand, an aneurism shows pulsation in its entire circumference, and in form of a widening of the whole tumor isochronic with the pulse and rhythmic. This can be felt whenever and wherever the finger is placed, and is not changed by pushing aside the tumor. The period of existence has a direct influence upon the pulsation in both kinds of tumor. The older the aneurism the less distinct the pulsations, on account of the formation of layers of fibrin on its walls; the older the abscess, contrariwise, the more distinct the pulsations become when situated upon an artery, because, always increasing in size, it continually nears the artery, and its liquid contents extending, are more easily set in motion by the beats of the artery. The conditions become much more complicated when an abscess and an aneurism exist next to each other, or one above the other. The patient may then, only too easily, be the sacrifice to a false diagnosis. The most distinguished authorities of all countries and of all times have made such mistakes. One example, of more modern date, will be enough.* The case was a fluctuating tumor in the axilla, which presented all the appearances of an inflammation of the cellular tissue, in which, however, pulsations were distinctly felt; they were considered as imparted, and the tumor held for an otherwise ordinary abscess. A first incision emptied pus. Then every doubt as to the nature of the tumor seemed dispelled. The bistoury was used a second time, going deeper, in order to widen the incision, at the same instant a powerful stream of bright, red, foaming blood spouted up, and shortly after the patient died. We ought never to proceed to the opening of a tumor about which the slightest doubt remains. The stethoscope will help us to detect the characteristic bruit of an aneurism which is wanting in abscess. The fine exploration trocar, or the acupunture needle are our last resort, and may be introduced into almost any doubtful tumor, without fear or danger.

Treatment.—Ordinarily the emptying of pus is the indication of nature. Only seldom, especially in anti-dyscrasic treatment, is it desirable to favor resorption by cathartics, mercurial ointment, painting with iodine, bandage pressure, etc. The opening of an abscess should not be delayed: 1st. When it is seated in the axilla, near the anus or the urethra, particularly when with fæces or urine pus is mixed. 2d. When the pus is situated deep, under fast fibrous tissues, as for instance, in the hand (also the fingers),

* Bardeleben, Chirurgie, vol. 1, p. 275.

the foot, deep in the thigh, etc. 3d. When, from the beginning on, important functions are interfered with by the situation of the abscess, *e. g.* in abscesses of the pharynx and isthmus faucium. Further, those abscesses should be opened early which threaten danger by their proximity to one of the greater cavities of the body, to the cavity of a joint, to important tendons or bones. The operative treatment of abscess resolves itself into punctures, incisions, setons, cautery and blisters. For most small abscesses a simple puncture with the lancet is sufficient. If there is great reason to fear the entrance of air into the cavity of the abscess, a subcutaneous puncture with a trocar is perhaps better, especially in deep abscesses. The entrance of air into wound cavities has gotten to be a great bugbear, and in the treatment of wounds in general, in which I have had a certain measure of experience, I have never seen any evil effects from it. A simple incision and splitting the pus cavity to about two-thirds of its greatest diameter, is oftenest employed in opening abscesses, and best fulfills the indication in phlegmons, perfect and quick emptying of the pus. The direction and place of the incision are readily determined by the form and situation of the tumor, the long diameter being the one usually chosen. The seton has the advantage of preventing the reclosing of the opening, but leaves an ugly scar. It was for Chassaignac* to improve upon the seton, and owing to him it has become almost obsolete in the treatment of abscesses in general. Our present system of wound drainage is based entirely upon his plan. Instead of the seton, he introduced long tubes of gum, with numerous openings through which it is intended the pus shall flow off, and through which injections can be made, if necessary, to cleanse or irritate a wound surface. The pus does not always flow well through this tube, especially when of a thick, sticky consistency, and in some cases the tube becomes clogged altogether, and the flow is interrupted.

Then free incisions, one on each side of the abscess, should be made at once, in order to obtain unobstructed open drainage. In fact, it were safer to adopt this plan in all swellings that require incision, throughout the whole domain of surgery. During my service on the surgical staff of the French army, in the Franco-Prussian war of 1870--71, we made counter-openings freely. Tubes were used but little. Oftenest not. If the tube is used, it is introduced fastened by a silk thread to an oblique opening (eye) in the point of the stilet. The trocar is first passed through the long diameter of the abscess, and the stilet, with thread and gum tube attached, drawn back, and thus it glides, without difficulty or disturbance of any kind, through the abscess.

Cauterization and blisters merit the lowest place, if they merit a place at all. The former was used, in one case of hot abscess of the cheek that came under my personal observation ; the caustic used was caustic potash, the stick was taken and rubbed over the summit of the abscess until, in a second or two of time, the pus was entirely emptied. It is perhaps a little more painful than puncture or incision, but it leaves a very good, slight and symmetrical scar. This is the only advantage. It is well to employ it for this reason, when the patient is a woman, as the one mentioned was. Hot abscesses are usually single, although I had a case in which there were half a dozen of medium size in different parts of the body, which pointed, broke and healed without treatment, and so rapidly that treatment was really impracticable; they were brought about by too free living on the part of the patient, who had no further trouble as soon as put upon lower diet. The appearance of a small bead of pus on the summit of an abscess is usually regarded as signifying that it is ripe, but do not wait for this if the abscess is red, hot, and fluctuation is distinct. If there is reason to fear that the edges of the incision will close before the cavity of the abscess is entirely filled out, put a wad of charpie in. Emollient cataplasms aid in bringing hot abscesses to ripeness.

In cold or lymph abscesses the contents are, as the name indicates, of a serous or lymphatic character, translucent, with whitish-yellow, caseous flakes, shiny, thready, differing markedly from the pus bonum et laudabile of hot abscesses. Cold abscesses are soft, circumscribed, without pain upon pressure, lying not far under the skin, which retains its normal color. Fluctuation is easily felt. There is no inflammation in the surrounding tissue. The most frequent cause is a dyscrasia. If they grow very large they may, by pressure, then cause pain in the surrounding parts, in which case the skin above them becomes thin, dark red, and finally breaks through in one or more places. The watery contents already described then flow out, and a fistulous ulcer remains, that is very difficult to heal. If such an abscess remains long near a bone the latter suffers with it, becoming carious. It is our

* Traite pratique de la suppuration et du drainage chirugical, Paris.

first duty to treat the dyscrasia, and to think of local treatment only after the general condition of the patient has been improved; we may then try to bring the abscess to resorption, by means of spirituous frictions, painting frequently with tinct. iodine, bandage pressure, cold douche, and, according to Velpeau, blisters. If these do not succeed, and the general health of the patient is better, we may proceed to open a cold abscess, especially if it threatens to break out itself, or threatens a bone by its proximity. It may be opened upon any plan we please, as in this case it is inflammation that we wish to induce, and not to avoid. The same general precautions and rules are applicable in cold as in hot abscess, as regards operative measures. The injection of exciting and irritating medicaments after the opening of the cold abscess with the lancet, is suggested.

Schaack injected red wine or a solution of sublimate or caustic potash; Rust, boiling water. If, after the opening of the abscess, the skin that covers it is very thin, bluish, or near death, it should be cut away with scissors in its entirety, and the wound treated according to remaining indications, generally with stimulating dressings.

Hospital Reports.

UNIVERSITY HOSPITAL.

CLINIC OF JOHN ASHHURST, M.D.

Professor of Clinical Surgery in the University of Pennsylvania.

Reported by Louis J. Lautenbach, M.D

Case 1.—Enlargement of the Prostate.

This man, somewhat beyond middle age, has for some time past noticed that he passes his urine more frequently than he formerly did. He has also noticed that he is required to strain, and that the passage requires a longer time. He has noticed a scalding sensation in the head of the penis, with neuralgic pains in the same region.

The stream which he makes is not propelled with the ordinary degree of force, nor does it have the normal parabolic curve; it comes out slowly and shows no evidence of a propelling force, and falls almost perpendicularly. In stricture of the urethra the stream is narrow, but it is propelled by the ordinary degree of force, and has the ordinary parabolic curve. In enlargement of the prostate there is often no diminution in the size of the stream, but as the propelling force is lost the urine drops vertically.

In order to prove the supposition of enlarged prostate, it is necessary to make a careful examination of the urethra, especially of its prostatic portion, and of the bladder, where we shall probably find a small quantity of residual urine, that is to say, of urine which always remains in a bladder, which cannot be completely emptied. This man has passed water one hour ago, so that if we find urine present in the bladder, its amount will be a moderately fair test of the amount of residual urine. In cases of prostatic obstruction there is usually not much difficulty in introducing an instrument, but sometimes, on account of the curve of the prostatic portion, there is present an obstruction to its introduction. In order to overcome this it is sometimes necessary to use an instrument with a considerable curve. Passing up the catheter we find the prostate enlarged. The amount of enlargement of the middle lobe is not considerable, but the lateral lobes are quite large. Passing the catheter into the bladder, we do not find a very great amount of urine, not as large an amount of residual urine as we frequently see, but it comes out without any force, simply dropping from the end of the catheter. There is enlargement of the prostate without any stricture.

Our patient tells us that he is able to empty his bladder without much trouble. It is very fortunate for him that the obstruction is not of such a form as to interfere completely with the evacuation of urine.

It is very important, when there is much residual urine, that the patient's bladder be completely emptied by catheterization once or twice a day. To relieve the symptoms of which he complains, which I believe to be entirely due to enlargement of the prostate, we will use ergot, which causes contraction of the unstriated muscular fibres, and has been extensively used in enlargement of the prostrate with very good results. If it, however, should occasion bad symptoms, then it will necessarily have to be abandoned, and something else substituted for it.

Case 2. Traumatic Stricture of the Urethra; External Perineal Urethrotomy, without a Guide.

We have in the house a man, whom I carefully examined the day before yesterday, with a bad stricture of the urethra, a traumatic stricture, occasioned by a fall a long time ago. Retention of urine is not present, but there is almost retention; the urine has been constantly dribbling for the last five or six years, gradually becoming worse.

In these cases, before attempting any operation, an examination of the urine must be made, with the view of throwing some light on the condition of the internal organs, and also for the determination of the prognosis. If by this examination evidence of an advanced disease of the kidney is developed, we would not attempt to perform the operation which I propose to do today, because the risks would be too great. If there was advanced disease of the kidney, we would, instead, puncture the urethra behind the stricture, to relieve the bladder, and then trust to being able to pass an instrument at some future time, or allow the patient to remain with a fistula.

The urine has been carefully examined; its specific gravity is 1.020, with a strong alkaline reaction; there is a mere trace of albumen.

The sediment is composed of ammonio-magnesio-phosphate, mucus and pus corpuscles, vesicular epithelium and a few granular casts. From

this examination there is no doubt of the bladder being diseased, and this is aggravated by the ammoniacal condition of the urine, this ammoniacal condition being also increased by the further progress of the cystitis. The two conditions mutually react one on the other. Besides the condition of the bladder, there is undoubtedly some disease of the kidneys; in fact, it would be impossible for him to have stricture so long without its having caused some disease of the kidney. Such examinations of the urine, although of great value, are yet subject to error; that is, a negative result may give rise to the supposition of there being no renal disease. In some forms of kidney disease, however, no albumen or tube-casts are found, and it is just one of these conditions which is often connected with a condition of stricture such as is here present. The interstitial form of suppurative nephritis often gives no evidence of its presence by the urine, and is very apt to be connected with strictures. As we have no further data, however, we must trust to the examination, which leads us to the supposition that there are no marked changes in the kidneys. In this case, therefore, it would not be proper to refuse this patient the best chance which he would have if his kidneys were healthy.

The operation which I consider that it will be necessary to perform here, is that of external urethrotomy; but if I can get an instrument in the urethra to pass the stricture, I will then split the stricture. The latter method, the introduction of an instrument and the splitting of the stricture, is attended with much less danger than the operation by section. There is, in the first place, some risk of hemorrhage in the section method, both primary and secondary bleeding being occasionally met with. Besides the risk of hemorrhage there is the further risk of increasing any existing disease of the kidney, causing uræmia, and there are all the dangers incident to other operations of the pelvis, peritonitis, etc.

We must first make a very careful examination and endeavor to get an instrument into the bladder. The smallest instruments we have are the filiform bougies, which, while of great value, sometimes lead to error, the instrument appearing to have passed the stricture, when in reality its end has turned upon itself. During the examination, keep the patient as warm as you possibly can. First introducing a metallic instrument—a good one to begin with is a No. 15, French scale—into the urethra, we touch the dense cicatricial tissue which constitutes the stricture. This instrument will not pass, and we must go down in the scale, being careful to remember that metallic instruments of very small size may prove very dangerous. Unless skillful, I would not advise you to use such instruments any smaller than a No. 11 or 13 of the French scale, as otherwise you will be apt to produce false passages. In this case there are as yet no false passages, which is favorable. I will now try a No. 7, French scale, which is a dangerous instrument. Although I turn the point in different directions, it does not seem to catch anywhere. Usually the opening in a stricture is not at the centre, but at one side, and if the point of the instrument only presents at the centre, there is but little chance of entering. Using now a No. 6 French scale, with great care, I still fail to enter, and am compelled to resort to the filiform bougies, but with these also am unsuccessful, the end of the instrument turning on itself. Sometimes by giving the end of the bougie a corkscrew turn, it can be made to enter the stricture, but here this also fails.

The only thing that now remains to be done is to perform the operation of external perineal urethrotomy without a guide, the old fashioned "perineal section." Had we been able to get even a filiform bougie through the stricture we could then have used the ingenious instrument suggested by Prof. Van Buren, of New York, and widely popularized by Prof. Gouley. It consists of a catheter, grooved on the back, the end of the groove being bridged over so as to form a tunnel. The tunnel end of the instrument is slipped over the end of the filiform bougie, and thus passed around the bougie, through the stricture, when it can be used either as a catheter or as a staff.

In performing the operation of external urethrotomy you want to get all the light you can. The patient is placed in a lithotomy position and an ordinary staff, passed up to the seat of stricture, is held firmly in the median line by an assistant. The incision for the exposure of the urethra is made in the median line, being careful not to begin further front than necessary, making the incision from an inch and a half to two inches long. The incision is to be carried directly down to the staff. When this has been done you can sometimes make the instrument pass the stricture without further trouble. In order to draw the edges of the wound apart, I am in the habit of using aneurismal needles held by assistants. Feeling now for the groove of the staff, you cut directly down upon it, thus opening the urethra in front of the stricture. Now hunting for the opening in the stricture, a grooved director or a probe is passed in, and the stricture slit up, when immediately a sound can be passed into the bladder; now passing in a catheter at the meatus, the instrument is guided by the grooved director into the bladder. The catheter is left in the urethra for five or six days, that the parts may be moulded about the instrument, as it were, thus facilitating its re-introduction when it is removed. After that time, the catheter is withdrawn and a full-sized sound passed every three or four days. The catheter is secured by means of adhesive strips attached to the skin of the penis itself. Fasten a few strips down along the sides of the penis clasping the catheter, then make these secure by a few circular turns of adhesive plaster about the catheter and a few turns around the penis, being careful not to make the latter to tight.

In this operation we are not obliged to cut any very large vessels, and in consequence, there is usually not much bleeding. The operation, if carefully performed, is not in itself very dangerous, and in the majority of fatal cases death has been caused, not by the operation, but by previously existing visceral disease. It will be necessary for the patient to use the catheter occasionally after he leaves the hospital, in order to keep the urethra dilated, and thus prevent a recurrence of his stricture.

MICHIGAN COLLEGE OF MEDICINE.

CLINIC OF PROF. LA FERTÉ,

Prof. of Anatomy in Michigan College of Medicine.

Mr. A., æt. forty five, whose hand was bruised between two cog wheels.

Gentlemen, I bring this case before you that you may form your own opinion as to whether this wound is healing properly or not.

Suppose we had necrosis of the bone, how would we find it out, or how would we know it? We would know by the sensation we felt on examining it with a probe. We want to know when a wound is doing well, and when it is not doing well; these are points which are very important.

As I said before, we know when there is necrosis, by the grating sensation. Now what causes this grating sensation? It is caused by the bone being denuded of its periosteum; in health the bone is covered by periosteum, but when it is denuded there is necrosis, and you have a rough, uneven surface of bone. We have another disease of the bone, ulceration, in which the surface is not nearly so rough as in necrosis. In ulceration of the bone it is covered with disintegrated bone, somewhat like sand, which is not the case where there is necrosis. In hip joint disease, third stage, where sinuses exist leading to dead bone, you give an injection which is known to possess the property of being capable of removing this material from the surface of the ulcered bone. Now, when you have removed this sandy material from the bone, you have a clean surface and granulation goes on more favorably. In soft parts it is just the same; in soft chancre there is a covering of gray material; to treat the case properly we first dry the ulcer, make use of escharotics for the removal of this gray material lying over the surface of the ulcer; you now get a clean surface, then stimulate, and granulation goes on nicely. If we had dead bone the edges of the granulation around this wound would be spongy; very characteristic where you have a good deal of dead bone. Where you have a sinus in hip joint disease the margins, according to some pathologists, resemble a hen's anus that is reverted. We will stimulate this a little, it seems to be rather sluggish; you notice these spongy granulations above the integument, sometimes called proud flesh; we will destroy that.

Case 2.—Mr. B., æt. twenty years, who had a deep cut on the ball of the thumb. Gentlemen, here we have a wound, which will heal by granulation or second intention. In a young child with such a wound, we would expect healing by first intention. Some pathologists say, in very young children, the wound can unite by direct adhesion of the surfaces to one another without any inflammation. In first intention there is a certain amount of inflammation, but that inflammation does not run on to suppuration.

The majority of pathologists deny that we can have healing without a certain amount of inflammation, no matter how young the child may be.

In all wounds that heal by granulation, we have a certain amout of serum thrown out; this serum becomes changed into pus; a few hours after the margins of the wound are brought together, you will find along the edges a certain amount of swelling, afterwards the swelling disappears; this swelling is caused by irritation of the blood vessels. The blood vessels become dilated, this dilatation of the vessels produces expansion of the walls, then, as a consequence, they are thinner, and blood cell will be thrown out After a while this infiltration will be absorbed, when the swelling will disappear and granulation progresses.

These granulations, you will find, are little red dots scattered over the wound; touch one and the patient experiences pain; but whether these bodies have nerves penetrating into them subcutaneously, or simply lying under them, is a disputed point. Blood vessels are freely distributed in these bodies.

From your knowledge of pathology, you will understand that where there is a great deal of swelling we have considerable serum thrown out, and excessive suppuration may take place. As we have commenced with the cold water dressing in this case, we will continue it. Now, what action do we expect to get from the cold water? It will contract the blood vessels, prevent an excessive amount of serum being thrown out; consequently less pus will be formed and granulation take place more rapidly. These stitches we will leave in for four or five days.

Case 3.—Gentlemen, what is the diagnosis of this case? "A swelling, the result of sprain." Now what is a swelling? "Œdema." What causes that œdema? "Effusion." This effusion is characteristic of what? "Inflammation." Now, according to your theory we have inflammation. Is that inflammation in the synovial membrane of the wrist joint or on the dorsum of the hand? "It is on the dorsum of the hand." What other name for inflammation of the cellular tissues? "Cellulitis." Would that cellulitis cause the joints to be stiff? "It would." A filling up of the space between the bones and the integument will prevent the fingers from bending. There is not very much œdema to these fingers, but on the back of the hand is considerable stiffness. What is the stiffness of a joint called? "Ankylosis." For example, in fracture of the leg, there will be stiffness from disuse, inability of the person to move himself. When he tries to move the joint finds firm resistance. What kind of ankylosis do we call that? "Fibrous ankylosis." Sometimes the adhesions are very strong in the joint, when surfaces become knit together so that there is scarcely any motion at all. In all cases of this kind you put the patient under chloroform, all muscular action becomes dormant, and you are able to distinguish between bony and fibrous ankylosis.

Here is a rule to guide you: Always, wherever there is the slightest amount of motion, you may rest assured that the ankylosis is fibrous, no matter how slight the motion; when bony union exists in a joint it is entirely immovable. In bony ankylosis, you may have to chisel out a piece of the bone, in order to bring the limb into a more favorable position. In fibrous ankylosis in the knee joint, for example, you break up the adhesions by force, and follow that up by passive motion every other day, as the case might be. In these cases you will have considerable inflamma-

tion in the joint. You subdue this inflammation by lessening the flow of blood to the part. This is done by pressure on the femoral artery, which will regulate the supply of blood to the part. When you use pressure, watch the patient very closely, for fear of gangrene setting in below the point of pressure. What will we do in this case? Use absorbent remedies; muriate of ammonia, thirty grs. to ... apply a bandage and keep the bandage wet with a solution of thirty grains of the muriate of ammonium to the ounce of water. Also use passive motion, with the hand in an elevated position, to break up the adhesions.

Medical Societies.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, Thursday, November 2d, 1881, the president, Dr. Edward L. Duer, in the chair.

Dr. Robert P. Harris exhibited twenty-three casts of female bony pelves, illustrating the varities of deformity affecting labor. They were obtained in Paris, by Dr. T. Hewson Bache, for the Museum of the College of Physicians.

Purpura Hemorrhagica.

Dr. Henry Beates related the history of a child, healthy for the first four months of its life, at which age it was attacked by thrush; ten days later an ecchymosis of purpuric character appeared on one leg, and a few days later spots of the same character appeared over the body; on the fifth day the stools were tarry, showing intestinal hemorrhage; a bronchial secretion was also stained with blood; on the seventh day a hemorrhage started from an abraded spot on the perineum; various local styptics were applied to this spot without result, until a red hot needle was used as a cautery; on the tenth day a hemorrhage occurred from the canthus of one eye, and on the fifteenth day the child died, from exhaustion. At the autopsy the internal organs were found quite exsanguine.

Bursting Pelvic Cyst.

The patient had been for some time in poor health. Nine months ago she observed a tumor in the right iliac region. On one occasion, after slight exertion, she felt something give way; this was followed by intense pain and collapse; she recovered, and has had no return of the tumor.

Hemorrhagic Diathesis.

Dr. Wm. Saveny related the history of a boy, five years of age, who had fallen and received a slight wound of the scalp from a nail sticking out of a post; it was a mere scratch, and did not need a stitch to hold it together, but it bled profusely; all sorts of domestic remedies, including cobweb, had been tried, without avail. The doctor finally succeeded with lint, wet with Monsel's solution, and continued firm pressure. A few days later the same boy fell off of one step on to the floor, there was no external wound nor loss of blood, but the side of the face was enormously swelled, from hemorrhage into the tissues. A course of iron and tonics has improved the boy's appearance, but he is still pale.

Dr. Harris inquired if there was any history of hæmophilia in the family? Had the boy large knee-joints? There is a hemorrhagic diathesis entirely distinct from true hæmophilia. The latter is rare in cities, but is more frequent in the country. The descent is through the females of a family, but the disease appears only in the males; the Jews in certain districts of Germany present many examples. There is a remarkable family near Elkton, Md.

Dr. Saveny replied that there were no evidences of hemophilia in the family. The mother was pallid, had red hair, but did not lose much blood in labor.

Dr. Horace Williams had seen a case of obstinate and prolonged hemorrhage after the extraction of a tooth; it was finally stopped by fitting a cork into the alveolar cavity. An infant, aged nine days, was attacked with purpuric spots over the body and bleeding at the naval. To the latter were applied, successively, styptic colloid, tannin, Monsel's solution, Monsel's salt, in powder, and finally, transverse pins and figure-of-eight ligatures; but the bleeding reappeared as soon as the latter came away, and the child finally died from loss of blood.

Dr. R. A. Cleeman had under his care a young man who had previously suffered from profuse hemorrhage for two days, consequent on the extraction of a tooth; the hemorrhage was finally stopped by Dr. Hartshorne, who plugged the cavity with a styptic. Dr. H. advised the young man never again to run the risk of a hemorrhage of any kind, as it would probably prove fatal. Recently he had been suffering severely from a toothache which nothing but extraction could relieve. Dr. Cleeman put him on gallic acid internally, and tannic acid locally, for two weeks before the extraction, which was accomplished without any unusual loss of blood.

In a case of nasal hemorrhage, the anterior and posterior nares were plugged, but then ecchymoses appeared around the eyes, and the plugs were removed; transfusion of a few ounces of blood was employed, and the hemorrhage ceased and did not return; the patient died three months later, of phthisis.

Dr. E. L. Duer considered gallic acid a very valuable remedy for hemorrhage. He would like particularly to bring before the Society the old but neglected remedy, erigeron, or fleabane; the tincture and the volatile oil are very efficient, when used internally, to stop hemorrhage. The oil may be given in doses of ten drops every ten minutes until the bleeding is checked, after which it may be continued at longer intervals until the tendency has passed away.

Dr. Githens had been using oil of erigeron for a number of years, with remarkable success, as an internal hæmostatic. It was far more reliable than any other with which he was acquainted.

Imperforate Rectum.

Dr. Githens had performed an autopsy this afternoon upon a baby, aged twelve days, that had died from occlusion of the bowel. The

anus was perfect, but as no meconium was passed an examination of the rectum was made; the latter was found to be a cul-de sac about one and a half inches in depth, as a tumid swelling could be felt above; a nick was made at the upper extremity of this cul-de-sac, and gas and meconium escaped; two days later it was found necessary to enlarge this opening, but at no time did any solid fecal matter pass nor did the color of the milk appear in the fæces. Death occurred from collapse, from escape of the contents of the bowel into the peritoneal cavity. At the autopsy the rupture could not be found; the transverse colon was filled with well digested milk, the upper part of the descending colon doubled sharply on itself and was bound down tightly to the posterior wall of the abdomen, there being no meso-colon on the left side; the lumen of the colon at this point was also obstructed by an exaggerated valvula conniventes (?) which formed a septum reaching half across the colon, and had prevented the passage of the solid portions of the fæces below that point; the rectum was distended with some liquid, dark, fecal matter.

A very remarkable circumstance in connection with this case is the fact that a former child of the same parents died at the end of the third day, there having been no discharge from the bowels; and the mother's aunt on her mother's side, had lost five children out of seven from the same cause; one of the five had been operated upon, but the condition returned after the lapse of six months.

Report of Microscopical Examination of Specimens presented at the last Meeting by Dr. Wm. Parish; by Dr. H. Beates.—The specimen removed from the cervix uteri of case No. 2, is carcinoma, of the encephaloid type. The small tumors taken from the uterine cavity of case No. 1, for the relief of continued hemorrhage, prove, on section, to be hyperplastic glandular utriculares, mucous membrane and parenchyma. The intimate relationship of the uterine mucous membrane with the muscular structure is clearly shown, and the features of clinical interest in this instance well demonstrated. The mucous follicles or glands located on the free border in considerable number, indicate that the growths originate from the fundus. The follicles are the seat of active epithelial proliferation and papillomatous degeneration, which latter process, it may be remarked, is *not* characterized by the regular relationship of cells to vessels, seen in typical or benign papilloma, but by large multinucleated, irregularly-shaped cells, arranged in groups, without any apparent regularity or system. This condition is strongly suggestive of carcinoma. The lesó-fibres are found to be infiltrated, in many places, by proliferated epithelium cells, showing that the morbid process involves the parenchyma.

—To promote the cause of temperance in Germany an attempt is to be made to establish coffee-taverns for the poorer classes, similar to those opened in this country. A society has been formed with this object, and a meeting to carry it out has been held, at Frankfort on-the-Main.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Clinical Observations on Albuminuria, Based upon a Study of sixty-two Cases in Private Practice.

BY ARTHUR V. MEIGS, M.D.,

Physician to the Pennsylvania Hospital.

(Read October 4, 1882.)

During the last eight or nine years it has been my habit to keep a record of the examinations of urine I have made. That record now contains notes of between sixteen and seventeen hundred examinations, and a study of it recalls to my mind, with more or less distinctness, the histories of sixty-two persons suffering with albuminuria.*

In a number of instances I have been able to follow cases for a series of years; from this circumstance in particular. the number of years the patients were under observation, I have been enabled to satisfy myself of some clinical facts. particularly in reference to the diagnosis and prognosis in this complaint, which I hope may be worthy of your attention.

That which has most impressed me is the impossibility of making a prognosis, with any degree of exactitude, in most cases of Bright's disease. Of course, in the plainer ones, the decision is easy; if asked an opinion in a case with a large, or even moderate amount of albumen in the urine, with increasing heart failure, and evident decline of strength and vitality, with headaches and the peculiar white complexion of the disease, it is easy to prophecy that such a person will not live long, and the prophecy, nine times in ten, comes true; if called, however, to decide questions of the future for a young man of thirty-two or three, previously well, but for some weeks complaining of headaches, malaise, and boils, and then examination of the urine shows a slight amount of albumen, granular and hyaline casts, and abundance of rather small oxalates, the question of the future is not so easily decided. I have seen such cases go on pretty well for a few months, then suddenly have convulsions, and die in a few days. Again, persons presenting identical symptoms, after being sick a few weeks or months, entirely recover. To my mind it is impossible, in the present state of our knowledge, to anticipate the future, and the patient should always have the benefit of the doubt, and be shown the brighter rather than the darker side of the picture

I know of three persons in whose urine I found albumen and tube-casts, accompanied with all the other signs of Bright's disease, more than eight years ago, who are yet alive. One is a lawyer in easy circumstances, who was taken sick in January, 1874, when he was fifty-six years of age, with what appeared to be a bad cold, but he had extreme dyspnœa and excessive restlessness and nervousness, although he is usually very self-composed. The dyspnœa seemed greater than could be accounted for by the extent of disease of the lungs, which amounted

* Many of these cases occurred in the practice of my father, Dr. J. Forsyth Meigs, but a large majority of them I saw from time to time myself.

only to a moderate bronchitis; the urine being examined, it was found to contain a trace of albumen, some blood, and tube-casts. It should be said that this man had suffered in previous years with attacks of gravel, when he would pass blood and small calculi. Nearly four years afterwards there was still a trace of albumen in the urine, and granular casts, showing that the condition was by no means merely temporary. Ever since he is liable to severe colds, and always suffers more than common with oppression, although it usually takes the form of a common coryza. He is now sixty-four years old, and an unusually young looking, active man of his years.

In contrast with this case, a woman of about sixty was seized in the night, having gone to bed apparently in her usual health, with an attack of oppression, and what her physician called congestion of the lungs, so violent that it was thought she would die at once; she, however, rallied by morning. An examination of the urine, made a few days afterwards, revealed the presence of a slight trace of albumen and casts. Four months afterwards there was still a trace of albumen in the urine, and granular and fatty casts, although she was up and about as usual, being merely very weak, having no apparently urgent renal symptoms. At a later examination the trace of albumen was still found, but no casts. About seven months from the first discovery of the disease she had another violent attack of oppression, and died in a few hours. Now what are the points to distinguish these two cases? One died after a few months' illness, and the other, having had apparently the same complaint and almost identical symptoms, is, after eight years and a half, still alive, and apparently, unusually well for his time of life.

In December, 1874, a lawyer in full practice, then about fifty four years of age, was taken with an attack of acute catarrhal pneumonia, and was also found to have albumen and tube-casts in the urine. He was sick all that winter and the following spring, the urine constantly containing albumen and granular and hyaline casts. The albumen and casts were found in the urine during 1875 and 1876, and part of 1877. On May 2d, 1877, about two and a half years from the onset of the disease, there was at last no albumen found, and the microscope revealed nothing abnormal. Since that time, although the urine was examined in 1878, 1880, 1881 and 1882, there has never been found either albumen or tube casts, and the patient, now a man sixty-five years of age, enjoys very good health, having had no return of the disease in more than five years.

The third case is a woman, whose father, brother, and two sisters have died of the same disease. She has had a trace of albumen and hyaline and granular casts in her urine since March, 1874, when she was about thirty-one years of age. I have records of this condition in 1874, 1876, 1879, 1880, 1881, and 1882. In February last she caught cold, and seemed for some time on the verge of a severe renal attack, having coryza, so that her nose was almost entirely stopped, and there were bronchial râles heard in the chest, but an amount of dyspnœa, seemingly out of all proportion to the extent of the disease, that could be detected by physical exploration; the albumen in the urine also increased very much in quantity. In some weeks, however, she recovered, and this summer seems in her usual health.

The father of this patient had a severe attack of hepatic colic, and passed several gall-stones, in 1877, but afterwards he continued in pretty fair health for some time. On May 9th, 1879, a trace of albumen was found in the urine; this continued to be present at succeeding examinations, but no tube-casts were found at this time or afterwards, although they were carefully sought for, and about December, 1880, eighteen months from the original discovery of his disease, he succumbed to an attack of uræmic convulsions, being seventy years of age. A son and two daughters of this man died of the same disease some years before. The son, after having had dropsy, lived for several years in tolerable comfort, until a severe cold proved fatal. With the history of this son and one of the daughters I am not familiar, but the third one I saw, and she died in convulsions. The condition of this person before her final illness, which lasted only a few days, was in no way different from that of her sister, who is still living, and has had the disease for nearly nine years, and the attack which the surviving one had last March was exactly like those of which I have frequently seen other people die.

I maintain, therefore, that with our present knowledge it is impossible, in doubtful cases, to prognosticate what the result will be, and that for the patient and his family, as well as for the credit of our profession, we should be very guarded in our prognosis. The presence of albumen and tube-casts in the urine, even when found for so long a time as two years continually, is not, as shown by one of the histories I have detailed, a reason why we should necessarily give a fatal prognosis, and this is particularly the case when the patient is a person past middle life. In the face of such authorities as Beale and Grainger Stewart, many practitioners think the microscopists can better judge (by examining the urine) of the stage and form of Bright's disease they have to deal with than they themselves can. Grainger Stewart is emphatic upon the subject. On page 271 of the American edition of his work on "Bright's Disease," he says: "Some authors attach great importance to the tube-casts. They are of undoubted value in establishing the existence of Bright's disease, considered generically, but they afford comparatively little assistance in the differential diagnosis of the different forms. Any form of tube-cast may occur in any form of the disease, and at almost any stage. Indeed, all the leading varieties may occur simultaneously in one case." Beale says (Kidney Diseases, Urinary Deposits and Calculous Disorders), "Dr. Basham thinks he can judge of the stage of Bright's disease by the character of the urinary sediment. I wish I could agree with him in this conclusion. The more carefully the matter is investigated the more convinced am I that it is unsafe in many cases to attempt to draw inferences as to the stage of the disease from the character of the urinary sediment only. Nothing but a careful

consideration of every point connected with the case will enable us to arrive at a general conclusion concerning the state of the disease. . . . Dr. Basham says: 'The most untractable and hopeless form of *morbus Brightii* is that represented by the presence of the fatty or oily cast.' This statement requires some qualification, for although it is quite true that some of these cases are terribly and rapidly fatal, it must be admitted that some live for twenty years or more, and die at last of other disorders." With regard to the presence of oily casts in the urine, and it is upon their discovery that microscopists found their gravest prognosis, Dr. George Johnson says (Lectures on Bright's Disease, New York, 1874), "The appearance of oily casts and cells excites less alarm now than it formerly did. It indicates that in certain parts of the kidney the secreting cells and inflammatory exudations are undergoing fatty transformation; but I have seen many cases of complete recovery after oily casts and cells in great numbers had appeared in the urine continuously for many weeks."

A very common symptom of renal disease, and one upon which there is not much stress laid in the majority of books upon the subject, is dyspnœa. Whenever a patient is found suffering with dyspnœa, and particularly if there is great nervousness, and loss of self-control, and anxiety, with no other fully sufficient cause for its existence, suspicion of renal disease should be aroused, and the urine examined, even if there are no other symptoms whatever pointing toward a lesion of the kidney. These attacks of dyspnœa frequently come on with great suddenness in persons who have not considered themselves sick, and such attacks are often quite rapidly fatal. This condition has been described as renal asthma, but I believe it much more common than is usually supposed. Another symptom of Bright's disease, which I have frequently noticed, and have never heard described, is coryza, of such a character that it gives rise to very much greater distress than any ordinary cold in the head; with this there is not much discharge from the nose, but the patient complains that he can get little or no air, except through the mouth, this being accompanied with excessive oppression, much more than the condition would seem to warrant. This symptom was first called to my attention by my father, Dr. J. Forsyth Meigs, in a case we saw together about nine years ago.

The suddenness of the onset, or perhaps it would be more correct to say, of the discovery of the existence of this disease, is often very great. In one instance, I knew of a young man, previously supposed healthy, seized with a convulsion while sitting at the supper table, after he had finished his day's labor as a wagon driver; this was followed by others, and the case ended fatally in a few days. In a second case, I was called upon by a young woman to explain a swelling of the vulva, with which she was suffering; examination of the urine revealed the existence of a large amount of albumen; this continued for some time, but after prolonged use of iron, her condition improved, and she had apparently fair health, until about two years later she became pregnant, and died within a few days after the birth of her child. In a third case, a man fifty-four years of age was seized in the night with epistaxis, a thing he had not had since he was a boy; examination of the urine revealed the cause, and about six weeks later he was found one morning, insensible, in the bath tub; examination showed that he had right hemiplegia, and he died in three days; a vessel in the brain had ruptured, presumably from the same degeneration which six weeks earlier had caused the nose to bleed. On the other hand, the insidious nature of this disease and of its onset is a matter of such common report, that I will not weary you with any cases illustrative of this fact.

The existence of oxaluria, or of uric acid lithiasis, is a prolific source of mischief to the kidney. The deposit of oxalates, or uric acid in the kidney, and its passage outward, occurs most frequently in persons who are large eaters, living an inert life, and taking but little exercise. Such people are common among the rich in large cities, and I have seldom failed to find tube-casts in the urine of any one who passed gravel for any length of time, whether oxalates or uric acid, even if the calculi were microscopic in size, and this commonly before any albumen was to be found. Later, if there is any considerable amount of gravel passed, albumen and blood will be found in the urine. If the attacks of gravel occur often, they are apt, at last, to be followed by Bright's disease, directly caused, probably, by the mechanical irritation of the lining membrane of the tubules of the kidney, by the sharp edges of the minute calculi passing through them.

It cannot be proven by statistics, and yet I think there is strong ground for believing, that the proportion of deaths caused by affections of the kidney is greatly on the increase. The tendency of modern life seems to be such that a larger number of deaths are caused by degenerative processes, and less by acute disorders. In former times, children were less delicately reared, and a larger proportion of the frailer ones, probably, died from exposure and want of care; now, beginning at childhood, and continuing up to old age, we are much more careful to avoid exposure, and are more self-indulgent, at least, as far as our bodies are concerned. Who, in modern times, except the professional athletes, would undertake the physical labors of the Emperor Charles V, of Germany, of whom Motley says, that he was able to tell, at a time when all journeys were made on horseback, or by boat, "of his nine expeditions into Germany, six to Spain, seven to Italy, four to France, ten to the Netherlands, two to England, as many to Africa, and of his eleven voyages by sea!" Now-a-days, the majority of city men are in their places of business all day, and take but little exercise, eating as much and as rich food as in former times, and drinking not a little withal. The natural and necessary consequence follows, that after years of this kind of life, the excretory organs degenerate: first the kidney, which is the common sewer of the body, and, like the heart, has to do continual work, from the hour of birth until the hour of death. It is a common thing, in modern life, to see a man naturally robust and gifted with a large appetite, become more inert

as years go by, when he will gradually give up his active exercise, until finally he takes none; still the eating and drinking go on, and he becomes fat and sluggish; finally he loses health, and then examination shows that degeneration is beginning in the kidney. I could instance several cases of the kind, but my space will not allow me.

The drift of my paper has been to try to establish that we should, in all ordinary cases of albuminuria, be very guarded in our prognosis, except when it is self-evident that the case must be rapidly fatal. I have now under observation, fifteen persons, seventeen, if I count two who have albuminuria alternating, or parallel with, diabetes mellitus, who have been suffering with this complaint for a greater or less length of time. With three of them the disease began nearly nine years ago, and they either have it now, or have entirely recovered from it, after more than two years' continual duration; yet in regard to no one of them do I feel able, even in my own mind to guess, much less to formulate an opinion, as to how much longer they may live. There are absolutely no data, if such cases are considered in the light of the experience of the sixty-two I shall mention, upon which to found a positive prognosis.

Another observation I have made, is in regard to the death of very old people. We are all agreed, I presume, that when a very old person dies, and we report the death as one of old age, it is because we are unable to put the finger upon the exact part of the old and worn-out machinery that at last refuses to work, and thereby causes all the rest of the mechanism to stop. This direct cause, if sought for, will frequently be found in the kidney. To examine the urine is not always a thing that strikes us, particularly when absolutely no symptoms appear to point toward kidney disease. I have seen a number of instances in which old people seemed to be fading out, as they often do, yet have felt entirely unable to explain to myself any direct cause for the failure, until the urine was examined, when there was found albumen, with granular and hyaline casts, and sometimes a few blood corpuscles. A careful inquiry would perhaps reveal the fact that the amount of urine passed was very small; all this without any other symptom to point toward kidney disease; at the same time, the failure of the patient being very gentle and gradual: or else, as not unfrequently has happened, senile delirium existed, either violent or mild in type, followed at last by death.

In the whole sixty-two cases which I will now summarize collectively, there have occurred twenty-six deaths, thirty-four are, to my knowledge, still living, some in better and some in worse health, and of two I have lost sight.

Five were cases of ordinary acute desquamative nephritis, with the occurrence of one death and four recoveries. In one instance, a child, there were two attacks, two years apart, the first being unaccounted for, the second following scarlet fever; the second case occurred after scarlet fever; the third after diphtheria; the fourth was in a young man, apparently healthy previously, and now in good health; his attack only lasted a short time; the fifth and fatal case was in a boy of about fifteen years of age, and came on while he was at boarding school, the onset being insidious, and the disease progressing from bad to worse until death occurred.

Four cases seemed to be caused by the passing of gravel, principally oxalates. These people are still all living, although they have had albumen and casts present in the urine, on and off, for varying lengths of time; two of them for six years past, one for seven years, and the fourth has had two attacks of nephritic colic, about a year apart; on each occasion, albumen and granular casts, uric acid and blood corpuscles were found in the urine.

Twenty-two cases I class as of ordinary Bright's disease, there being probably contracted kidney in the majority of instances, and of them, fourteen are dead. I made no post-mortem examination in any one of these cases. In most of these cases (seventeen of them) the onset was insidious, there being no illness to mark the beginning of the disease; in one, the patient was seized with a convulsion at the supper table, having been supposed previously to be in good health; in a second, there was a violent attack of congestion of the lungs, with terrible dyspnœa during the night, the patient, a woman, having gone to bed thinking herself in good health; in a third there was dyspnœa and congestion of the lungs occurring suddenly; in a fourth the condition of the kidneys was discovered concurrently with an attack of catarrhal pneumonia; a fifth was a man who had had attacks of nephritic colic. He had a violent attack of congestion of the lungs, with bronchitis and dyspnœa, and was found to have albumen and casts in the urine, which condition continued, on and off, for four years; he is now in apparently good health, although the first attack was nearly nine years ago. Of these twenty-two cases, two were in one family, one soon dying, and of the other I have lost sight: two in another family, one dying and the other, I think, being still alive, although the disease was discovered three years ago; five cases occurred in another family, the father, son, and three daughters. The father and mother of this family had ten living children, five reaching adult life, one died of consumption, and the other three, and the father, of Bright's disease, the surviving daughter has had the disease for nearly nine years. In another family there were three cases, all women; one died, having had uræmic convulsions, and the other two still live, both having had the disease for about three years. A brother has now cancer of the rectum. The mother is still alive, and although seventy-four, enjoys good health. The father died at quite an advanced age, but I do not know of what disease.

The next twenty-two cases I must classify as unaccountable; eighteen of them occurred in persons over sixty years of age, and the other four were well on in life; one was over ninety, three over eighty, and two over seventy years of age. Of these people only five are dead, and of the five fatal cases, one was the man over ninety, two were over eighty, a fourth was seventy-seven, and the fifth sixty-seven.

The next four cases were of people advanced in life, and they died of general break-down, having in three instances concurrent disease of the heart and kidneys, with implication of the lungs, and the fourth had renal and brain disease.

In two instances there has been albuminuria with diabetes mellitus; in one, sugar was discovered in the urine six, and in the other four years ago. Since then there has been sometimes sugar, and at others albumen, at times both at once, in the urine of these two women. In neither instance have tube-casts ever been found. I mention these two cases in a paper on albuminuria, because both have frequently had albumen in the urine, and I confess myself unable to explain the phenomenon, the quite frequent presence of albumen in the urine, without tube-casts, or any other sign of renal disease; and yet I can hardly believe the albumen to be merely due to cystitis, for if that were so, it should be constantly present.

In one instance, I have followed for four years the history of a man who drinks to excess. At the beginning of, and for a time before, his attacks of delirium tremens, while he is consuming alcohol freely, he often has bloody urine, which will contain tube-casts of all the varieties at different times, fatty, hyaline, and granular. When he ceases his consumption of alcohol, as he has quite frequently done for two or three months at a time, the urine becomes normal, as far as chemical tests and microscopic examinations will reveal its condition. In the light of this case, how can we believe that the abuse of alcohol does not produce renal degenerations? Is not this man sure to die of Bright's disease, if he continues his indulgence in alcohol?

Another case was a man over fifty years of age, who was seized with rheumatism; he progressed badly, and was much more sick than the amount of rheumatism would seem to warrant, and at last, after about three weeks, died, having obstruction of the bowel and inflammation of the kidneys, as shown by the presence of albumen and tube-casts in the urine; also hydrothorax, and extreme stupor, which seemed uræmic. This man had had an attack of influenza about three or four weeks previous to his fatal illness. Can there be any connection between the severe influenza and the rheumatism, and renal inflammation and obstruction of the bowel, of which this patient died?

The last case I will mention was a boy, who died very suddenly, of congestion of the lungs, probably the first stage of pneumonia. A trace of albumen and granular casts were found in his urine, which was obtained a short time before death. This boy was about sixteen years of age, and did not seem much sick on the afternoon of one day, being up and dressed, the next morning dying, in a state of maniacal delirium, with his lungs extremely congested. There was, unfortunately, no post-mortem examination made. This case would seem one in which the pulmonary affection was primary, and yet it might be that he had a latent contracting kidney.

There has been much said of later years about kidney disease without the presence of tube-casts in the urine, and of the presence of casts without albumen. I may say that I have frequently found tube-casts in the urine when the most careful chemical examination failed to detect any albumen, and *vice versa*, have failed to find any casts at all, when the event proved the existence of renal disease.

The subject of treatment I have not even mentioned in my paper, although much might be said about it, because I have already trespassed too long upon your time.

In conclusion, I will briefly recapitulate the points which it has been my endeavor in this paper to prove.

First, that in no ordinary, uncomplicated case of Bright's disease, should a prognosis of speedy death, or even of incurable disease, be given, for I have related cases in which the disease was chronic, lasting more than two years, and which ended in complete recovery, and others in which the person affected has lived nearly nine years.

Second, that dyspnœa, usually taking the form of renal asthma, is much more common than is usually supposed, and when properly appreciated is a valuable diagnostic sign of the disease; also that severe coryza is a complication or accompaniment, and has a diagnostic value.

Third, that Bright's disease, as a cause of death, is on the increase.

Fourth, that it is a very common cause of the deaths of old people, probably being the direct cause in many deaths reported as of old age.

Fifth, that the passage of gravel, even when microscopic in size, but particularly if large enough to cause nephritic colic, is a prolific cause of the disease.

Sixth, that the occurrence of tube-casts in the urine without, or in advance of, the presence of albumen, is very common, and *vice versâ*, persons may die of Bright's disease, and the most careful examination fail to show any tube-casts, although there may be albumen constantly present in the urine.

Seventh, that the abuse of alcohol is certainly a cause of kidney disease, as proved by the case I have related, in which it has, again and again, caused hemorrhage from the kidney, with the temporary presence of albumen and tube-casts in the urine, disappearing again with the cessation of its consumption.

Pyrogallic Acid in Treatment of Venereal Ulcers.

Pyrogallic acid, recently introduced by Dr. Jarisch, of Vienna, has been used with success in the treatment of venereal ulcers, by M. Vidal, at the St. Louis Hospital, and M. Terillon, at Lourcine. The following unguent is employed at Lourcine:—

℞. Acid pyrogallic, ʒ x
Amyli, ʒ x
Vaseline, ʒ iv. M.

This unguent should be fresh and well guarded in a glass-stoppered bottle.

As fatty dressings to venereal ulcers are often inconvenient, M. Terillon recommends the following composition:—

℞. Acid pyrogallic, ʒ j
Amyli, ʒ j. M.

This may be directly applied to the ulcers.

These applications, made daily, notably abridge the duration of treatment.

Editorial Department.

Periscope.

Nephrotomy and Nephrectomy for Pyelitis.

In the *Lancet*, Dr. George Elder records a case of scrofulous pyelitis occurring in a woman aged 36. Physical examination of lungs gave evidence of tuberculous disease. She first experienced severe pains down the left side and leg; painful micturition of turbid and scanty urine; no hæmaturia; to these were added, rigors, fevers, night sweats, occasional sickness, anorexia, progressive emaciation and loss of strength. The urine was strongly ammoniacal, muco-purulent, and containing triple phosphates in abundance. She did not pass more than sixteen ounces in twenty-four hours. She had a large, fluctuating, abdominal tumor, which was examined, under ether. Dullness extended from the anterior superior iliac spine up to and continuous with the cardiac area, and in a transverse direction from an inch to the left of the umbilicus round to the spinal column. The impression was given that the kidney was converted into one large abscess. Nephrotomy was performed by the usual lumbar incision, and a large quantity of curdy pus escaped. The kidney had been converted into two sacs. The shock was slight, and for a few days the urine was freer from pus than formerly; the wound discharged freely.

"An attack of septic pleuro-pneumonia of the right base, which all but ended the record of the case, coupled with the want of benefit following the nephrotomy, strengthened my resolve to extirpate the kidney as soon as the patient's condition warranted it. This I did, on June 20th, by enlarging the former incision and supplementing it by a crucial. There was very great difficulty in enucleating the kidney from its capsule, mostly experienced at the point of insertion of the vessels. The friability of its structure also contributed to this, and at the same time gave rise to copious bleeding, which pressure by means of sponges checked. I tied the blood vessels and ureter *en masse*, with strong carbolized Chinese silk, and then cut away the kidney. Under the strain of the ligature, the friable tissue of which the pedicle was composed gave way, and for a time the hemorrhage was appalling. A second and then a third were applied higher up, with the effect of stopping all bleeding, except from a few small arteries, which were separately ligated. A few loosely applied metallic sutures, simply used to approximate the edges of the wound, after it had been washed out with carbolized water and tamponed, finished a very tedious operation. Through failure of the spray producer it was not done antiseptically.

"The shock after the operation was extreme, so much so that for several hours it was doubtful whether the patient would rally. Frequently repeated rectal injections of pancreatized beef tea and brandy stood her in good stead. For the first forty-eight hours the scantiness of the renal secretion assisted in making the outlook more gloomy, but at the end of this time the quantity became natural in amount. After the operation its quality became normal, and has remained so ever since. With the above exceptions the patient made an uninterruptedly good recovery, and when she was discharged from hospital, on account of the annual cleaning, she had got quite plump, and there remained of the wound only a small sore.

"*Remarks.*—This was a very unpromising case upon which to perform such a grave operation, not only on account of the prostration induced by the condition for which relief was sought, but also because of the state of the chest and the drinking habits of the patient. I regret that the major operation was not at first performed, as by it time would have been saved and the inter-current attack of pleuro-pneumonia averted. The variations in temperature before alluded to ceased with the nephrectomy, as also the hemi-hyperidrosis, and before her discharge there was an improvement in the chest symptoms."

Fracture of Skull in an Infant—Death.

In the *Medical Times and Gazette*, Mr. Godlee reports the case of a child aged one year and seven months, who fell a distance of only two feet, striking the side of his face. He was stunned at first, but soon came round, and cried for about five minutes, after which he became drowsy; he retched several times, but was not actually sick. Some blood was flowing from left ear, which in a few minutes gave place to a watery fluid. On admission to hospital he was pale and drowsy; some tenderness behind left ear, pupils equal and reacted to light, no nervous symptoms of any kind. On the sixth day general convulsive movements of the limbs and face set in; in the afternoon the temperature ran up to 105°, and at 6 P.M. the child died.

At the *autopsy* an extensive fracture of the skull was found, beginning about the middle of the left parietal bone, in a bifid extremity, and extending downward to the back of the meatus externus; after passing a little forward, so as to reach the roof of the meatus, and separating the tip of the auditory process, it passed along the meatus, rupturing the upper and back part of the membrana; it then again bifurcated, the posterior part passing through the internal auditory meatus to the jugular foramen, the anterior extremity towards but not quite reaching, the foramen ovale. There was a considerable amount of pus in the cavity of the arachnoid, principally on the left side and at the base of the brain, but not extending to the upper parts of the hemispheres. Beneath the arachnoid, however, there was a copious effusion of puriform lymph, most abundant about the base of the brain, but extending in less amount to the sides and front of the hemispheres, and reaching to a smaller extent as far as the vertex. It extended along the medulla, and for two inches along the spinal cord; it also followed the velum interpositum into the third ventricle; but the

lateral ventricles did not contain an excess of fluid, and their contents were not abnormal. The vessels of the base were searched, both with the naked eye and the microscope, for tubercle, but no sign of it was found. The other organs, with the exception of the lungs, which were congested, showed no signs of deviation from health.

Remarks.—It is to be noted, in the first place, that severe fractures of the skull in children of this age are by no means common, their soft, elastic bones being indisposed to fissure in the same way as those of an adult. In the second place, it is remarkable that such an extensive fracture should result from so trivial an injury. The question of the possibility of a fall of two feet producing such a result as was found, suggested itself as one that might, under certain circumstances, have had a very interesting medico-legal bearing. But the most important lesson to be learned from this and similar cases is, that if a fracture of the skull ruptures the membrana tympani, and also passes across the internal auditory meatus, it constitutes not only a compound fracture of the skull, but a compound fracture of the skull communicating directly with the cavity of the arachnoid. No condition can be possibly conceived more favorable for originating a septic meningitis. It is surely wise to treat such a fracture on antiseptic principles, namely, to clear away all wax and discharge from the ear, and then to inject the meatus constantly with some one-to-twenty carbolic acid lotion, and to apply either a gauze or iodoform dressing, changing it when it becomes soaked. I can testify to the safety with which this may be done, and to the efficiency of the proceeding if it be done early, and not, as in this case, when the mischief has already occurred. It may be objected that even if the meatus externus be purified, the fracture still communicates with the external air through the Eustachian tube. This must be granted, but there is no more reason to suppose that organisms exist in the tympanum, than that they are to be found in the bladder, which we know is, under ordinary circumstances, not the case; the healthy mucous surface of the Eustachian tube, like that of the bladder, no doubt preventing the spread of these low forms of life along their surfaces. The blood which flows from the nose and mouth in many of these cases no doubt passes along the Eustachian tube, and if this takes place to any great extent it is perhaps likely that the fracture would be contaminated through this source; but, seeing how seldom prolonged bleeding takes place from these cavities, I would strongly urge that the line of treatment mentioned should always be adopted.

Operations for the Cure of Hernia.

In the course of a long article on this subject, in the *Annals of Anatomy and Surgery*, Dr. William Dunnet Spanton, of England, says:—

As a single matter of observation, and, in spite of the positive statements to be found in most writers to the contrary, it would appear that an infinitesimal proportion of cures are effected by the use of trusses. In the London Truss Society, out of a total of 96,886 cases of reducible hernia, only 4387, or 4.53 per cent., are said to have been cured in this way. A truss can only act by direct pressure on the part to which it is applied. But to close a hernial opening we need something more than this. As I have said, the moment the pressure is taken off the rupture descends afresh, and this must necessarily be so as long as the canal remains patent. If, therefore, it be possible to combine the filling up the canal itself with organized tissue at the same time that the tendinous boundaries are firmly approximated, we shall in this manner secure a much firmer support than in any other way.

The more recent procedures, having this object in view, consist of a variety of modes of ligature on the one hand, and my operation with the screw (or strephotome), on the other.

With regard to my own operation, I have now a record of over sixty cases, all of whom have recovered. The patients varied in age from five months to thirty-four years, and the herniæ differed in size, from small, tense ones to enormous, lax ones. All were of the inguinal kind, some oblique others direct, and a considerable proportion were congenital. An incision is made, large enough to admit the forefinger through the skin of the scrotum at the fundus of the hernial sac, an inch and a half or two inches below the pubic spine. The sac, with the fascial tissue covering it, is then separated from the skin, by passing the knife or the handle freely around the internal surface of the wound, until a sufficient extent has been separated to permit the finger easily to invaginate the sac into the hernial canal, which is readily accomplished by pushing the sac, with the left forefinger, up to the internal ring.

After carefully examining the condition of the parts within reach of his finger, especially with regard to the position of the blood vessels and the boundaries of the aperture, the operator retains his forefinger in the inguinal canal, thereby protecting the spermatic cord, which lies below his finger, and at the same time closing the internal ring so as to prevent any protrusion of the bowel. Sometimes, with a very patent ring, it is necessary for an assistant to place his finger externally on the groin to make perfectly sure of this, especially if there is any cough or struggling. It is, however, wiser to wait a few moments, and to let the patient become quiescent before proceeding further. Then, holding the strephotome firmly in the right hand, the surgeon thrusts the point through the skin of the groin at that part of the surface which corresponds to the outer pillar of the internal ring, which is also pierced by the point, which now comes in contact with the left forefinger. Having given the screw a turn, the point is made to pierce the invaginated sac, and pushed on through the internal pillar (conjointed tendon) as high up as can be safely reached, the left forefinger carefully guarding the

point of the instrument throughout. Another turn is now made, causing the screw to pass through the invaginated tissues and across the pillars of the external ring as many times as the length of the canal and the nature of the case will permit. The left finger is gradually withdrawn as the point passes downward and outward through the opening in the scrotum, the spermatic cord lying behind, and slightly compressed by the gradual tightening of the hernial canal. The point of the screw is then protected by a small india-rubber ball, and the handle lies flat on the outer surface of the abdomen. The scrotal wound is closed by a single wire or hair suture. In from seven to ten days the screw can be removed, and a compress used to keep the parts in position.

Digestion of Meat.

The *Lancet* says:—

It is well known that the digestion of different kinds of meat is the more easily effected the longer the time that transpires after the death of the animal. The explanation given is, that by keeping, the muscular fibres become gradually dissociated ; they soften, become less compact, and consequently are more soluble in the gastric juice. According to physiologists, however, it is not considered advisable to wait until decomposition sets in, because, in addition to its losing a great part of its nutritive qualities, the meat becomes so nauseous that no amount of cooking, or the addition of condiments, will much improve it. MM. Pasteur and Lemaire, in an interesting paper lately submitted by them to the Academy of Sciences, stated that meat too far advanced, or what is termed "faisandée," is most unwholesome, and it is a mistake committed daily by sportsmen to wait until the game gets into this condition, for it is then simply unfit to be eaten. The above-named biologists have shown that tainted meat contains animalcules, which do the work of transformation and destruction; and as it is difficult to ascertain exactly the extent of putrefaction that the meat has undergone, one is liable to consume it just at the moment when it should be rejected. M. Pasteur and other micrographers are of the opinion that these animalcules, of which there are no less than thirty species, are of the same nature as those that are found in living animals suffering from virulent maladies, such as charbon, etc.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Charles N. Hewitt's address, as President of the Minnesota State Medical Society, makes a pamphlet of 24 pp. It is in favor of a fixed standard of preliminary education, and a fair examining board.

——A study of the manner of transmission of syphilis in utero makes a pamphlet of a dozen pages, by Dr. Hugo Engel, of this city. His observations are acute and well worth reading. His favorite treatment is by mercurial inunction.

BOOK NOTICES.

Essentials of Vaccination. By W. A. Hardaway, M.D., etc. Chicago. Jansen. McClurg & Co. 1882. Cloth, 8vo, pp. 146. Price $1.00.

The beneficent discovery of vaccination is daily becoming more and more appreciated, in spite of the opposition to it manifested in certain quarters. The volume before us adds to the conclusiveness of the testimony as to its valuable prophylactic powers. Much of the author's space is taken up with the production and use of bovine virus, and on this account his essay will have especial value. In spite of all that has been written and spoken on the methods of propagating and employing this form of virus, an astonishing amount of ignorance about it prevails, and for that reason we hope Dr. Hardaway's book will be generally read. We have noted only one point where he seems to be at fault himself as to how vaccine matter should be used. That is (p. 110) where he says "the habit of using one quill for two persons is filthy and dangerous." It is singular that he did not appreciate that when one quill is used for two persons it is first *split in two* and each half used separately.

Rheumatism, Gout, and Some Allied Disorders. By Morris Longstreth, M.D. New York. William Wood & Co. (Wood's Library of Standard Medical Authors.)

Dr. Longstreth treats of the forms of rheumatism, its causes, pathology and ordinary course, its individual symptoms and peculiarities, complications, morbid anatomy, prognosis and treatment. The last three of the nineteen chapters of the work respectively, are on chronic articular rheumatism, gonorrheal rheumatism and gout. The author's opinions are carefully weighed, and his language even too cautiously non-committal in various passages. He writes from judicious observation, and his work merits careful reading.

The Diseases of Women, Their Pathology, Diagnosis and Treatment, including the Diagnosis of Pregnancy. By Graily Hewitt, M D. Fourth American edition. P. Blakiston, Son & Co. Price, paper, $1.50.

The work of Dr. Hewitt has been before the public more than ten years, and has been well received by the profession, both here and in England. The present cheap edition, with the author's latest revision, cannot fail to extend and confirm this popularity. It is neatly printed and contains 132 illustrations.

THE

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D. G. BRINTON, M.D.,
JOSEPH F. EDWARDS, M.D., } EDITORS.

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A PHILOSOPHER'S OBSERVATIONS.

As we have had a philosopher, and many think a great philosopher, among us, "takkin notes," this summer, to wit, MR. HERBERT SPENCER, it becomes us to collect with due diligence the pearls of wisdom which he lets drop from his lips.

Several of these have a medical bearing, and to them we give our attention. He made a speech in New York shortly before he sailed, in which he spoke of the characteristics of Americans. Among other things he said:—

"Everywhere I have been struck with the number of faces which told in strong lines of the burdens that had to be borne. I have been struck, too, with the large proportion of gray-haired men, and inquiries have brought out the fact that with you the hair commonly begins to turn some ten years earlier than with us. Moreover, in every circle I have met men who had themselves suffered from nervous collapses due to stress of business, or named friends who had either killed themselves by overwork, or had been permanently incapacitated, or had wasted long periods in endeavors to recover health. I do but echo the opinion of all the observant persons I have spoken to, that immense injury is being done by this high pressure life—the physique is being undermined."

This was not a passing thought, but Mr. SPENCER went on to elaborate it with his customary fullness of illustration and force of expression.

There is no doubt a certain amount of truth in it. There is a great deal of high pressure in certain centres of American life; there is fast living in every sense in certain strata of society. But are we, as a nation, much given that way?

In spite of all those respected neurologists who have so much to say on this subject, and whose reiterated statements Mr. SPENCER did but echo, we do not believe it.

It is highly characteristic of a New York doctor to be ignorant that any part of the American nation lives outside of New York City; it is a venerable trait of travelers to judge all of a country by the few specimens or classes they see in a few weeks' or months' trip.

If Mr. SPENCER wished to see American life as it is carried on by the great mass of our fifty millions of people, he should have had us pilot him to an interior town of Pennsylvania, or some county seat in Virginia, or to some cross-roads general store in any one of thirty States, and have there passed a few weeks. If he had not found a life as dull, as monotonous, as free from nervous strain and high pressure, as any he had ever seen, then we are out in our reckoning. Yet it is just this life that forty-eight out of our fifty millions lead.

Of course, take the two or three greatest cities of any prosperous nation, and the two or three busiest streets, and the hardest brain-working classes in these cities, and they are under an unhealthy degree of pressure. But how absurd for a man, especially a philosopher, to be led astray by such a narrow and faulty generalization as to suppose what is true of these few is true of the mass! Yet that is just what Mr. SPENCER has done.

As to his supposed facts, that men grow gray sooner in the United States, that they suffer more from nervous collapse, that more kill themselves from overwork, there has never been, and is not now, any evidence that any of these are so. There is plenty of testimony to the opposite

statement, that our people are better fed, better clothed, have healthier lives, bodies as strong, and a surer prospect of a green old age, than the English, German or French in their own homes. Are we asked where is this testimony? We reply, where it has been to the interest of powerful and wealthy corporations to get it accurately, for business purposes, not for the sensation of an after dinner speech. We mean the Life Insurance Companies. Their tables show that the expectation of life is, in this country, on the grand average, rather better than in any of the three countries named, and in special fields very decidedly better.

So much for the value of all this talk about physical deterioration in the United States, and so much for the "broad and deep generalizations" which some philosophers indulge in about a vast nation and its constitution, after they have been dined and wined by a very select circle in one or two of its great cities, and have stayed over night at several of its finest hotels!

THE LATEST ABOUT BACTERIA.

This time it comes from America.

Dr. Formad, of Philadelphia has made some experiments, from which he is led to believe that, contrary to the generally accepted view, bacteria are not the cause *per se* of disease, but are merely the vehicle of contagion, the means by which the poison of certain diseases is carried from one organism to another. He has found the tubercle bacilli of Koch, or, at least, bodies identical with them, in the sputa of non-phthisical patients.

He has taken matter infested with the diphtheritic micrococci (first demonstrated by Professor Wood and himself), and has succeeded in producing the disease in animals, while micrococci from the very same specimen, *after a thorough washing in plain water*, were perfectly harmless.

He believes that bacteria exist in all nature, and that, even when charged with the elements of disease they cannot produce the disease unless they find a resting place in some body that is, on account of some unexplained conditions, a suitable pasture for the growth and development of the particular disease.

This view, which seems to be a very rational one, has two important practical bearings.

In the first place, it teaches us very forcibly the value of water as a disinfectant, and in the second place, it lends much additional force to the idea that infectious diseases are due to chemical influences, which theory, if demonstrated, will do much toward increasing the potency of our therapeutic resources.

If these bacteria carry certain elements that are capable of producing disease, it is not unreasonable to hope that chemistry will step in and tell us the chemical nature of these poisons; from this standpoint it will be but a step to name the chemical that will prove the antidote, and by this process can we arrive at the most rational treatment of infectious diseases. Dr. Formad promises to have more to say on this subject, and we look forward to his researches with interest, for it would seem that he is on the right track.

NUISANCES.

A correspondent writes us, from Ohio, as follows:—

"Please give us your opinion of the following case:—

"A business room in our town is occupied by a clothier; the room (cellar) below is occupied by a lot of *loud* Swiss cheese. The merchant says the odor is exceedingly offensive to him, and complains to the town council, and wants said body to pronounce, not the cheese, but the cheese stored in the room in such close proximity to his place of business, a nuisance, on the ground of the *unhealthfulness* of the odor and the dampness caused by the daily sweating of the cheese.

"Having been appealed to in regard to the above matter, I took the position that the air of the store-room being impregnated with the odor emanating from putrefactive changes brought about in the fats and caseine in the process of thorough ripening the cheese, is not a fit medium for constant consumption by the lungs of the storekeeper. Am I correct?"

Of course he is right. It is a fundamental and incontrovertible principle of sanitary science, that all or any organic decomposition must, and will, produce, as an accompaniment of this change, as a necessary condition of retrograde

metamorphosis, a condition of the atmosphere that is inimical to a perfect state of animal health.

It matters not whether the decaying organic material be a small cube of cheese or an elephant; the difference is only one of degree, and not of kind.

We need not discuss whether these enemies to health that are produced by organic decomposition are bacteria, or gaseous, or what not! For all practical purposes we know enough, and this knowledge tells us, in no doubtful terms, that all organic decompositions will produce poisons to animal life, and that they must all be declared public nuisances.

DIPHTHERIA.

From the Board of Health, we learn that diphtheria has, within the past two months, become quite prevalent in this city.

One of the most terrible of all diseases, it has succeeded so far in eluding the penetrating grasp of science, and we really know no more about it to-day, that is to say, about its causation and prevention, than we did two decades ago.

It was with the greatest pleasure and pride that we published, last spring, the report of Professor Wood and Dr. Formad, detailing their experience with an epidemic of diphtheria at Ludington, Mich.

They concluded that the disease was caused by a specific micrococcus, and the National Board of Health endorsed their conclusions.

But now, this very same Dr. Formad has demolished his own conclusions. Within six short months since his results were published, he has declared them untrue.

Still, this apparent contradiction of facts will, we doubt not, bear good fruit, for, from what we can learn, it seems certain that these bacilli and micrococci (about which we hear so much), have an important bearing on the production of disease, even though they do not produce the disease per se.

In the meantime, until we learn something more about diphtheria, we must carefully *isolate*, *disinfect* and treat to the best of our limited ability.

LOOK OUT FOR SMALLPOX.

The warning comes from the South; smallpox is prevalent in Chattanooga, Tenn.; so also is it, nearer home. A dispatch from Havre-de-Grace, Md., tells us that Harford county is much excited over the prevalence of smallpox, which was introduced into that community last summer by some men coming to work in a canning factory.

You must ever bear in mind that the causative agent of smallpox can be carried great distances and produce the disease. A man may come from a region in which the disease is prevailing, and while perfectly well himself, may carry in his clothing, his beard or his hair the seeds of smallpox, thus constituting a nucleus from which may originate a most devastating epidemic. The following fact must ever be borne in mind: *He who comes at all into contact with strangers is exposed to a greater or lesser degree of danger of infection.* The remedy, or rather the prevention, is to be found in thorough and universal vaccination and re-vaccination.

Notes and Comments.

The Health of Criminal Women.

Dr. E. M. Mosher contributes an interesting article on this subject to the Boston *Medical and Surgical Journal.* His observations cover a period of four years, and were made upon 1704 cases of illness occurring among women committed to the Massachusetts State Reformatory Prison. He divides the women into three classes. Class I. Offences against person and property. Class II. Offences against chastity. Class III. Offences against public order. His conclusions are that

I. Intemperance and unchastity are the two vices which fill our penal institutions with women.

II. The influence of these vices is detrimental to health of body, increasing its susceptibility to disease, and lessening its recuperative power.

III. The diseases which follow as a direct result of these vices are syphilis, alcoholism, dyspepsia, rheumatism and general anæmia.

iv. Morbid conditions of body react upon the moral nature, increasing and perpetuating the tendency to criminality; hence the importance of careful medical supervision as a reformatory measure.

v. More ample provision should be made in all large cities for the isolation and thorough treatment of venereal patients of *both sexes*, either by the addition of special wards to the general hospitals or by the establishment of hospitals for this class.

vi. The women who commit high crimes, that is, larceny, burglary, arson, manslaughter, etc., possess a more sensitive nervous organization than those who commit only offences against chastity and public order.

Diagnosis of Fœtal Monstrosities.

That it would be exceedingly valuable, if the obstetricians were able to recognize before the delivery, if they have to do with an akencephalus, hydroencephalus, or other fœtal monstrosities, is clear. Prof. Calderini (*Ref. Deutsche Mediz. Zeit*, Aug. 10, 1882) has now demonstrated, from theoretical reasons as well—alteration of the pressure and increase of amnion fluid, in consequence of disturbed circulation and different functions of the kidney—as also on three successive cases of his own, that there always exists in cases of fœtal monstrosities hydramnios. This is plausible, and it would be well if further investigations should be made to settle the question, as many a delivery would be made in a different manner, if the obstetrician knew beforehand that he had to deal with a monstrosity.

Subcutaneous Injection of the Salts of Pilocarpin.

The salts used are the nitrate and the chlorhydrate, and the principal physiological effects are; congestion of the skin, principally of the face, exaggeration of the natural secretions, particularly of the salivary and sweat glands; acceleration of the action of the heart; elevation of the temperature at the initial period, which becomes persistent if diaphoresis does not take place later on; there is a more or less marked fall in temperature according to the abundance of transpiration.

Given in ordinary physiological doses, the salts of pilocarpin never induce vomiting or diarrhœa, or the sensation of extreme feebleness often noted after the administration of infusion of Jaborandi. Accidents produced by administration of the salts of pilocarpin at a less dose than one-third of a grain rarely occur, except in patients having some form of cardiac disease.

The injections hardly ever give rise to local accidents; it is well to commence with feeble doses, about $\frac{1}{12}$ of a grain, and gradually increase from that to $\frac{1}{3}$, $\frac{1}{2}$ or even one grain. When the daily dose administered is half a grain or more, it will be well to inject one-half in the morning and the other in the evening. Pilocarpin is employed in therapeutics, where it is thought possible to obtain a very marked curative effect from abundant sudation or from a greatly increased secretion of saliva. Hypodermic injections of pilocarpin have accordingly been principally employed in the treatment of the different forms of dropsy, in pleurisy, bronchitis and pneumonia, and in the treatment of acute articular rheumatism, epilepsy, eclampsia, etc.

Heredity of Sebaceous Cysts.

In the course of a clinical lecture, reported in the *College and Clinical Record*, Prof. S. W. Gross says:—

This man, who has a prominent swelling upon his scalp, tells me that his mother had a similar development. I asked him the question incidentally, because I had in mind the case of a man suffering with mammary cancer, upon whom I operated at this clinic, whose scalp was covered with these excrescences, and his daughter who came with him also had a number of them. Let me say in this connection that many surgeons mention as one of the points of difference between a malignant and a benign growth, that only the former is inherited. They seem to overlook that this also occurs in innocent tumors, even with the simplest of all, the sebaceous cyst.

Removal of Warts.

Dr. Unna, of Hamburg (*Monatschrift Prakt. Dermat.*, 3, '82), had a young girl under his charge, whose dorsal surfaces of both hands were the seat of over a hundred warts, daily more making their appearance. He made on gauze tissue a plaster mass, which contained 10.0 grm. arsenic and 5.0 grm. of mercury. This was kept on during day and night. Two weeks later all warts had disappeared and the healthy skin was seen. The cure here is not established by necrosis and dropping off of the excrescences, but like nature's spontaneous cure, by resorption.

We ourselves used to make cauterization our main treatment for the removal of condylomata.

A year ago, a patient came to us, who, besides suffering from icterus, due to catarrhal inflammation of the bile ducts, was affected with condylomata also. As the latter were very large, preventing the prepuce from being drawn forward, their removal was desirable. They gave rise to an annoying itching and to a fetid odor. Not wishing to operate on them while the patient still had the jaundice, we told him to dust the parts daily with

℞. Hydrarg. muriat. mit., ʒj
Acid. borac. pulver., gr. x. M.
Fiat pulvis.

and were not a little astonished to find three weeks later not a sign of them left. They were all absorbed. Since then we have often had occasion to use this powder, and invariably with the same good success.

Angina Pectoris—Death.

Dr. J. M. Stevenson reports a somewhat interesting case of angina pectoris, in the Pittsburgh *Med. Jour.* A man, aged 64, temperate and active, after being engaged in active work all morning, ate a full dinner. Immediately afterwards, with a cry of pain, he sank to the floor, struggling and insensible. Brandy and strong aromatic spirits of ammonia failed to elicit any evidence of their irritant properties. After using a variety of remedies, six drops of nitrite of amyl were poured upon a handkerchief and administered very cautiously, allowing an abundance of air After a few inhalations the face became flushed, pulse increased in frequency and fullness, respiration became quicker, in ten minutes all struggling ceased, and in twenty minutes consciousness returned. Three days subsequently he had a similar attack, which was relieved by the same means, but on the evening of this day he had another, and no one being present to administer the amyl, he died in five minutes. A post-mortem was refused.

Sulphurous Acid in Consumption.

Most readers are aware that sulphurous acid is one of our most important bacillicides, and the more to be recommended, as it can be inhaled with impunity. Mr. Julius Kircher, a pupil of Liebig, and owner of a chemical factory in Brooklyn, writes as follows to the *Zeitsch. f. d. œstr. Apoth. Verein.*

The observation of Koch has found a brilliant confirmation in my factory, where a large quantity of sulphur is evaporated daily. That in this process a great deal of sulphurous acid is formed can easily be imagined. During the forty-four years that my factory has existed none of the many laborers have ever been affected by tubercular consumption, nay, more, frequently enough persons in the beginning stages of this disease applied for admittance and were cured within a few weeks, simply by inhaling the sulphurous acid. If not too far progressed, these individuals become strong, stout, and perfectly healthy again.

All diseases zymotic in character, even cholera, stay away from his factory and those working there. Persons affected with bronchial catarrh are rapidly cured.

Phthisical patients should live in rooms where hourly 1 to 2 drachms of sulphur are evaporated on a warm stove. First eight or ten days there is increased irritation of cough and expectoration ; then these cease, and the individual rapidly improves. Convalescents should live for a time in rooms filled with aromatic watery vapors.

Nephrotomy.

In the course of the Presidential address at the last annual meeting of the Yorkshire Branch of the *British Medical Association* (*British Medical Journal*), Dr. T. R. Jessop reported the following interesting case: The patient was a female. Purulent urine was being painfully squirted every few minutes from an intolerant bladder. Nothing more than the single fact of purulent urine could be developed by the most careful physical, microscopical, and chemical examination. The neck of the bladder was dilated, and when the forefinger was swept around the interior of the viscus, the left ureter could be felt in the wall of the bladder, as firm and as prominent as a whip-cord, while the orifice of the right could only with difficulty be made out. The left kidney was exposed in the loin, its substance was incised, and from its pelvis there exuded from two to three ounces of offensive pus, after which an uninterrupted recovery took place.

Acute Heart Lesions in the Very Old.

It is a well-known fact, that acute diseases of the heart, at least, undoubtedly those of an inflammatory character, happen very rarely in the aged. Dr. Ch. Féré (*Revue de Med.*, 1882, *No.* 3) draws attention to a new etiological cause for these lesions. Among 134 autopsies which Féré made during seven months in the Salpêtrière he found seven acute diseases of the heart, peri- and endo-carditis. Of these, in one case the acute pericarditis had appeared as a complication of pleuro pneumonia (in senile persons

a very rare occurrence), and six had happened in consequence of diffused kidney lesions. Two of the latter were the common senile lesions of the kidneys; in the four other cases, however, secondary disease of these organs, besides dilatation of the pelvis of the kidneys and of the ureters, due to obstruction in the urinary passages, were noted. Féré mentions correctly, that these complaints are not common enough to be considered an accidental coincidence with the heart affection.

Local Treatment of Erysipelas.

Dr. Rothe recommends (*Memorabilien*) the application of the following liquid every two hours to the affected parts.

℞. Acid carbolic,			
Alcohol,	āā	1 part	
Ol. terebinthinæ,		2 "	
Tr. iodinii,		1 "	
Glycerinæ,		5 "	M.

This mixture causes no pain. Internally, he recommends quinine and digitalis, and an emetic if indicated.

The Cause of Tetanus.

Dr. F. Schuttze reports, in the *Neurol. Centrlbl.*, 1882, No. 6, the microscopical examination of the central nervous system of four cases of traumatic tetanus. In all the cases, nothing was found which would have been characteristic for an acute meningitis or myelitis. Schuttze is with justice opposed to all vague publications of the post-mortem examinations of such cases, and mentions that whatever he had read, so far, of such reports, were simply normal post-mortem appearances, which could be noted in any dead body. The anatomical cause of this dreadful disease continues, therefore, still to be unknown.

A New Anti-Scorbutic.

The *Med. Times and Gaz.* says that "amchur," which is made from green mangoes that have been skinned, stoned, cut into pieces and dried in the sun, has been introduced among the native soldiers in India as an excellent substitute for lime juice in scurvy. It also promotes digestion. One ration should be half an ounce, which would be an equivalent for one ounce of good lime juice.

Vaccinal Micrococci.

The *Lancet* says that M. Straus has plainly demonstrated the presence of the special micrococcus in microscopical preparations of the vaccinal pustule from the calf. He places the excised fragments of skin in absolute alcohol, cuts sections and stains them with methylamine violet, and then discolors them, until only the nuclei, the bacteria and micrococci remain visible. Under a strong magnifying power, the latter were visible, as extremely minute points, tinted blue, about a thousandth part of a millimetre in diameter, and grouped in colonies.

Correspondence.

A Numerous Progeny.

Ed. Med. and Surg. Reporter:—

There is a farmer living in this county, about eighteen miles from this city, who has nine children, the oldest of which is ten and the youngest two years old. I will give their ages, sex, etc.:—

Girl	10 years.
Twins (boy and girl)	8 "
" " "	6 "
Girl	4 "
Triplets (all girls)	2 "

These children are all living and healthy, and the parents are also healthy. Who can beat this?

Maryville, Mo. J. B. Morrison, M.D.

News and Miscellany.

Medicine in England in the Beginning of this Century.

In the course of the Introductory Address delivered at University College, London, Mr. Marcus Beck, in describing the past history of medicine in England, said "At the beginning of this century the profession was divided into distinct grades.

There were, first, the physicians who had, as a rule, received such scientific education as was to be obtained at that time. They had mostly attended lectures at one of the English or Scotch Universities, and spent some time in practical study in a hospital. Then there were the surgeons, licensed by the College of Surgeons, then just founded in its present form. These also had received some education in anatomy and surgery.

Lastly, there were the apothecaries, and to them fell the larger share of medical practice of the time. It was not uncommon, however, for these two last to be joined together in the person of one man, forming the surgeon-apothecary, who was the precursor of the modern general practitioner. The practice of the apothecaries differed from anything we have within the limits of the legitimate medical profession in the present day. They were essentially prescribing druggists, and could legally charge only for the medicine they prescribed. Thus they could receive no remuneration unless they ordered some medicine, and the more they ordered the more they got; a style of practice calculated to inspire a firm belief in the efficacy of drugs. It was not

necessary for the apothecary to receive any medical education beyond being apprenticed to some one already in the trade, and the jurisdiction of the Society of Apothecaries, which necessitated even this amount of training, only extended to a distance of seven miles around London.

The Epidemic of Typhoid Fever in Paris.

The latest information shows that the epidemic has assumed terrifying proportions. On October 22d there were 2175 typhoid fever cases in the hospitals. For the week before, from 25 to 50 patients were daily admitted to the hospitals suffering from this disease. On October 24th twenty-five burials of persons who had succumbed to the disease at their own residences, took place; on the 25th eleven. After October 15th the daily number of admissions to the hospitals ranged from 25 to 77, while from the 9th to the 14th they oscillated between 86 and 180.

At the commencement of the epidemic, the hospital administration was petitioned to create new services, but the work went on with characteristic slowness, although there is a new hospital (l' Hop. Bichat), all ready to receive beds, etc. Finally, when all the chronic cases had been discharged and the already filled wards encumbered with cot-beds, they set about hastily constructing barrack hospitals in the grounds of the Hôp. Cochin, Midi, etc. Even with these new services the hospitals are encumbered and the administration has been again obliged to open the provisory services in the two ancient edifices formerly belonging to the old Hotel Dieu, on the left bank of the Seine.

The hospitals of Paris, notwithstanding their number, prove totally inadequate when any epidemic occurs, and at the best of times are often encumbered with cot-beds.

The Secret of Noble Life.

Mr. Jonathan Hutchinson thus concluded his Introductory Address at the London Hospital: "If now I were to sum up in one sentence what I have been enforcing, it would be this; the secret of all noble life lies in belief, and the characteristic of all noble minds is the vigor with which they believe that which is true. Try to attain belief in the reality of all things; so shall you never want for motives, so shall you be able to live and work without hurry and without sloth. Finally, permit me to commend to you this formula; prize strength, love the beautiful, practice self-denial, and be patient."

Statistics of Suicide in Prussia.

According to details from official sources, which have recently been published in the German press, suicide is on the increase in Prussia, the annual proportion of self-inflicted deaths per 100,000 of population having risen from 13 in 1869, to 18 in 1880. The manner in which these suicides are carried out does not seem to have varied much, with the exception of a greater preponderance of poisoning among the female cases. May, June and July are the months most fatal in this respect. The number of suicides in each period of human life seems to increase with more or less regularity until the stage between fifty and sixty years of age is reached, which shows the highest proportion. There is an excess of deaths shown for the period between twenty and twenty-five years of age; still it does not alter the general fact as to the later portion of middle-age showing the most cases of suicide.

The Health of Providence, R. I.

According to the report of the health authorities there were 47 deaths in Providence for the week ending Nov. 11th, a slight increase on recent weekly averages. The youngest decedent was 4 days, and the oldest 86 years. Typhoid fever caused 10 deaths, which accounted for the total increase. There are about 214 cases of typhoid in the city. The severity of the disease may be judged from the reports of the physicians, which are as follows:—

Disease mild, 49 cases, or 23 per cent. of all. Disease average, 103 cases, or 48 per cent. of all. Disease severe, 62 cases, or 29 per cent. of all. Disease malignant, no cases. Total, 214 cases.

In the first week less than six per cent. of the cases were reported as "mild," in the last week more than 28 per cent. were so reported. The outbreak is very sudden and very severe, but probably very transient, and what is somewhat peculiar, is spread throughout the city and not confined to any one locality.

Certificates in Sanitary Science

The College of Physicians in Ireland has recently made arrangements for granting certificates in Sanitary Science. Stated examinations will be held in January, April, July, and October. Every candidate must be a Licentiate in Medicine, of the College, and must lodge a fee of five guineas, which will not be returned in case of rejection. The examination will comprise the following subjects: 1. Engineering, including hospital and house construction, sewage, drainage, ventilation, and water-supply. 2. Law; the Acts relating to Public Health; duties of health officers. 3. Etiology and prevention of disease; epidemiology, contagion, infection, hereditary influence, accommodation and conveyance of the sick, and the management of hospitals. 4. Chemistry; air, water and food. 5. Meteorology and climatology; vital statistics. The candidate will also be examined in the analytical chemistry of air, water and food.

Vinegar for the Sick Room.

The Boston *Journal of Chemistry* says:—There is a French legend that, during the plague at Marseilles, a band of robbers plundered the dying and the dead without injury to themselves. They were imprisoned, tried and condemned to die, but were pardoned on condition of disclosing the secret whereby they could ransack houses infected with the terrible scourge. They gave the following recipe, which makes a delicious

and refreshing wash for the sick-room: Take of rosemary, wormwood, lavender, rue, sage and mint, a large handful of each. Place in a stone jar and turn over it one gallon of strong cider vinegar; cover closely and keep near the fire for four days, then strain and add one ounce of powdered camphor gum. Bottle and keep tightly corked. It is very aromatic, cooling and refreshing in the sick-room, and is of great value to nurses.

Philadelphia County Medical Society Lectures.

A course of lectures by Prof. Austin Flint, Senior, of New York, on "The Physical Exploration of the Lungs by means of Auscultation and Percussion," will be given in the hall of the Society, N. E. Cor. Thirteenth and Locust streets, on Saturday, November 25th, December 16th and January 13th, at 8 P. M.

Lecture I.—The True Mode of Study and its Requirements as Regards Auscultation and Percussion. The Signs Obtained by Percussion.

Lecture II.—Auscultation and the Respiratory Murmur, with its Abnormal Modifications.

Lecture III.—The Râles and the Vocal Signs.

Com. on Lectures { JOHN B. ROBERTS, *Ch'n.*; CHAS. H. THOMAS; WM. S. LITTLE; M. S. FRENCH; EDWARD T. BRUEN.

The Athletic Association of the University of Pennsylvania.

The old University, ever foremost in all true progress, has determined to make a new departure. We have received a circular from a committee, who have in hand the organization of an Athletic Association, which shall comprise five departments: Boating, Foot-ball, Base-ball, Cricket and Athletics. There is no entrance fee, and the annual dues will be three dollars. It is proposed to lay out a running track, cricket, tennis, base-ball and foot-ball grounds, and build a gymnasium on the University grounds. To all who realize the importance of a *sound body* as the habitat of a *sound mind*, this proposed improvement will heartily commend itself. Any one desiring further particulars can address any of the committee, consisting of J. William White, M.D., H. Laussat Geyelin, Thos. G. Hunter.

The Veterinary College of the University of Pennsylvania.

A subscription of $10,000 has been received by the University of Pennsylvania, for the establishment of a veterinary college. Several physicians of reputation and ability are now in Europe, pursuing special courses of study to qualify them to fill professorial chairs in this new college.

Lebanon County Medical Society.

Dr. Carl Seiler, of this city, will deliver a lecture before the Lebanon County Medical Society, on the first Tuesday in December. His subject will be "Nasal Catarrh; Its Pathology and Treatment." The lecture will be illustrated by drawings, and patients will be operated upon.

Two Cases of Poisoning from Whisky.

The Glasgow correspondent of the *Lancet*, writes as follows: Two cases of poisoning from whisky drinking have been noted in our daily papers during the past week. One man had been drinking in a public-house till a late hour, and on going home he procured a further supply of liquor; shortly afterwards he fell asleep, and in a few hours fell from his chair, dead. The other case was that of a man who, in drunken bravado, agreed to drink a whole bottle of whisky "without taking it from his head," and did so, with the result that he soon became comatose, and had to be removed to the Infirmary.

Proposed Sanitary Museum in Sunderland.

A praiseworthy attempt is about to be made in Sunderland to extend the knowledge of sanitary matters among the residents in the North of England. The effort is initiated by Dr. Mordey Douglas, senior physician to the Sunderland Hospital for Sick Children, who proposes that the new municipal buildings be made to include accommodation for a permanent exhibition or Sanitary Museum, in connection with which lectures on health subjects may be delivered from time to time, the discourses to be illustrated by the various exhibits. The proposal is a good one and worthy of successful realization.

Public Nuisances.

At a recent meeting of the Board of Health of this city, nuisances were reported as existing at several points. A row of unfinished buildings were said to be unsafe, and water in the cellars emits a disagreeable smell. The Medical Inspector will make an examination.

We frequently see such reports and statements in the daily papers. We must say most emphatically that the public health imperatively demands that such nuisances should not be tolerated an hour.

The Commencement of Scientific Medical Education in England.

According to the Introductory Address of Mr. Marcus Beck, at University College, London, that institution, then called London University, was founded in 1826, and for the first time a systematic scientific education was given in London, on essentially the same lines as are followed to the present day.

Carlyle's Patience.

In his Introductory Address at the London Hospital, Mr. Jonathan Hutchinson, speaking of Carlyle, said: "He had not learned what we may, I think, without irreverence, style the Religion of Patience. By patience I mean not the mere passive virtue of endurance, which, indeed, is not unfrequently no virtue; I mean rather the ability, when we have done our best, under all possible circumstances, to rest undespairingly and trustfully for the result."

Poisoned by Mistake.

Up in Ontario, a short time ago, a man and his two daughters took some "herb tea," to relieve colds. They were all taken violently sick and died. It is supposed that deadly nightshade was among the herbs. We desire to say, in most emphatic terms, that he who attempts to meddle with drugs about which he knows nothing, is playing with fire, and can only be characterized as a very foolish person.

Unwitting Suicides.

This time it comes from New York. A man and wife *blow* out the gas in a room in a hotel, and the next morning are found dead. Thorough ventilation of rooms, active and intelligent night watchmen, and a general watchfulness over the guests of a hotel, might do much toward preventing these catastrophes, which are becoming altogether too frequent.

The Health of the Jeannette Arctic Exploring Expedition.

Lieutenant John W. Danenhower says that during all the time the Jeannette was imprisoned in the ice, the health of the crew was excellent. They were away from civilization of all kinds, floating about or imprisoned in the ice, for twenty-eight months, and not a single case of scurvy occurred. The expedition was a temperance one.

Unobstructed Drainage.

The City Solicitor of Philadelphia has rendered an opinion, in which he holds that the city is obliged to dredge docks into which the city sewers empty. This is a very important decision, since a free and untrammeled outlet for all sewerage is one of the prime essentials of a healthy city. Such action should be made compulsory upon the authorities of all cities draining into rivers.

Degrees of the University of Pennsylvania Open to Women.

At a special meeting of the Board of Trustees of the University of Pennsylvania held November 14, it was resolved that any of the degrees or honors of the University could be conferred upon women who shall pass the proper examinations.

Items.

—Hildebrandt, the eminent teacher of gynæcology, in Koningsberg, is dead.

—Duncan Campbell, M.D., a member of the Local Government Board, of Nova Scotia, died Nov. 15th in Port Hood.

—Dr. J. S. Mohr was found dead in his office in Chicago, Nov. 15th. He had apparently been dead for several days, but there were no marks of violence upon his person.

—On Nov. 15th, the Board of Health issued a proclamation declaring the epidemic of yellow fever in Pensacola at an end, but advising absentees to keep away a little while longer.

—An ordinance relating to the prevention of the spread of infectious diseases, was favorably reported by the Law Committee of Councils of this city, on November 15th.

—The Camden County Medical Society, on Tuesday, Nov. 14th, appointed the following committees: On Medicine, Doctors Snowdon, Mulford, Smith; Surgery, Benjamin, Gross and Blake; Obstetrics, Mecray, W. A. Davis, Jennings; Microscopy and Pathology, Ridge, Henry, Shivers, Hamilton; Medical Jurisprudence, Garrison, Ireland, Iszard; Nervous Diseases, Armstrong, Stout and Young.

—The officers of the American Public Health Association for the ensuing year are: President, Dr. Ezra M. Hunt, New Jersey; First Vice-president, Dr. Albert L. Gihon, U. S. N.; Second Vice-president, Dr. J. E. Reeves, Wheeling, W. Va.; Treasurer, Dr. J. B. Linsley, Nashville, Tenn.; Executive Committee, Dr. Thomas L. Neal, of Ohio; T. J. Turner, of the U. S. Navy; G. P. Conn, of New Hampshire; J. F. Billings, of the U. S. Army; J. J. Speed, of Louisville, and H. D. Frazer, of South Carolina.

OBITUARY NOTICE.

DR. SAMUEL WHITE THAYER,

A distinguished physician and one of the most eminent citizens of Vermont, died in Burlington, Nov. 14th, after a long illness, of blood poisoning, aged sixty-five. During the war he was surgeon-general of the staff of the Governor of Vermont, and established and organized three military hospitals. He leaves a widow and one son, Dr. Charles P. Thayer, of Boston.

QUERIES AND REPLIES.

A. O. S., Pa.—"Infarction" means a stuffing or blocking up.

V. W. J.—We would suggest measures looking to the relief of the dyspepsia, to overcome the constipation; producing daily free evacuations, as well as friction and support to the abdominal walls, until they regain their tonicity.

MARRIAGES.

COLLINS—LA TOURRETTE.—At Fort Union, on Thursday Oct. 5th, 1882, by the Rev. Jas. A. M. La Tourrette, Post Chaplain U. S. A., assisted by the Right Rev. Bishop Dunlop, of New Mexico, Genevieve, daughter of the officiating Presbyter, and Dr. Joseph H. Collins, A. A. Surgeon, U. S. A.

GRIFFITH—JENKS.—In the Woodlands Presbyterian church, Philadelphia, October 5th, by Rev. Dr. Benjamin Griffith, assisted by Rev. Dr. Crowell, Dr. J. P. Crozer Griffith, and Julia E., youngest daughter of Barton H. Jenks, all of Philadelphia.

DEATHS.

BENNETT.—Suddenly, at his residence, in Danbury, Conn., Oct. 27th, Ezra P. Bennett, M.D., aged 76.

BOND.—In this city, Oct. 26th James Bond, M.D., in the eighty-third year of his age.

COMLY.—In this city, Oct. 28th, Dr. Isaac Comly, in the 73d year of his age.

HOWELL.—In Woodbury, N. J., October 10th, Benjamin Howell, M.D., in the seventy-fourth year of his age.

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Communications.

CENTRAL AMERICAN MEDICAL CURIOSITIES.

BY FERD. C. VALENTINE, M.D.,
Of New York.

(*Continued from page* 400.)

Common wax is used internally as an antacid, emollient and laxative. The dose is unspecified. "Yellow ointment," which is employed to stimulate granulations in chronic ulcers, is composed of six parts of wax, twelve of turpentine, and sixteen of lard. These are melted together, strained through a cloth, and while still hot the yolk of an egg is stirred into the mass.

Cypress wood is considered sudorific, diuretic and astringent, the latter quality being also attributed to the fruit. Wild plums are frequently used in place of tamarinds, by persons whose "intestines are torpid," and much benefit is claimed to have been derived from their use in putrid dysentery. Those affected with itch rub the diseased parts with the leaves, to obtain relief from the itching and burning. The gum is used as is gum acacia.

The cocoanut offers its milk as an agreeable refrigerant, especially before ripening, and it is recommended in affections of the bladder and active uterine hemorrhage. The "hair" of the ripe cocoa is boiled in water and the decoction strained and given to patients with chronic uterine flow.

The flesh of the nut is ground up with water and given as an expectorant. Inasmuch as green cocoanuts are always obtainable in Central America, I have known only foreigners to assault their stomachs with the ripe flesh.

The leaves of the wild borage (Borago Sylvestris) are boiled, in the proportion of an ounce to three pints of water, and given in "side-ache" (pleuritis?) rheumatism, smallpox and measles.

Cabbage juice mixed with bread crumbs makes a poultice which is applied to the forehead and temples, to cure headaches.

Cumin seeds "are the most efficacious remedy for ventosities of the stomach." They also excite the sexual appetite, and are useful in tenesmus, when this symptom is not connected with bloody alvine discharges.

Contrayerba (several species of dorstenia) excites perspiration, comforts the heart (*i. e.*, is a sedative), and is an antidote to coagulating poisons, to malignant fevers, to worms, and to snake poison. A half teaspoonful of the powder is given in divided doses through the day.

Copalchi bark, in infusion, is extensively used as an anti-periodic, to cure acidity of the stomach and in slow digestion. It is highly praised as a remedy in hydrothorax, yet those who would use it are warned that it will do harm, and even produce dysentery, in cases where the stomach or liver is inflamed. The bark is chewed, to preserve the teeth. Splenitis is treated by wearing a plaster on the abdomen, composed of a combination of equal parts of powdered copalchi and soap, to which enough lard is added to make it easily extensible upon a cloth.

The juice of the coyol, a fruit somewhat like the tamarind, is said to be aphrodisiac, stimulant and diuretic. It is used to stimulate the

menstrual flow, to cure sterility in females, and to purify the blood. It is reprobated in cases affected with any disease of the thorax.

The leaves of crespillo or cabello de ángel (angel's hair), an agaric, are ground and applied over parts which it is desired to blister. Inasmuch as the deep burn produced is never followed by urinary trouble, the plant may be worth investigating. As a blister, however, it is not entirely reliable, inasmuch as in the crude manner it is used its time of action is extremely variable.

Deer horns are recommended in jaundice, intestinal worms, fevers, melancholia, nervous affections in general, and dysentery. The ash of burnt horns, two tablespoonfuls in rice water, twice a day, is used as a sudorific, to limit hemorrhages of all kinds, and as an antacid. In other affections the deer horn filings, one ounce, are added to a quart of water, boiled down to a pint, which is the daily dose.

Culantrillo (*Adiantum capillus veneris*, L.) in infusion, is given to parturient women, to abbreviate the enforced marital separation.

Coriander seeds are employed as carminatives, and to correct foul breath. Worn in a bag, near the throat, they are regarded as an amulet against all contagious diseases. A patient who consulted me for gonorrhœa, said that the prostitute who infected him must have been "very poisonous," because she had succeeded in overcoming the power of his bag of coriander, tied to a string around his neck.

All snakes are presumed to possess curative virtues, but I know only of three kinds being used. The masacuate (chicken-snake) is eaten by all, and especially recommended to convalescents. Powdered toasted rattlesnakes, in half teaspoonful doses three to four times a day, are recommended in low fevers, syphilis and skin diseases. A soup made of this snake is used for the same purpose.

Atrophied and contracted limbs are rubbed with the fat of the boba, a small snake, said to be very venomous.

Infusion of peach-leaves (1½ oz. to 8 ozs. of water, boiled down one-half), is recommended as a mild purgative and vermicide. The adult dose of this infusion is four ounces during the day.

The moss which grows on oak-bark is recommended for whooping-cough. Acorn tea is "buen remedio" for all forms of phthisis, and an orgeat made of ground acorns is beneficial to those "whose cough is accompanied by a throwing out of blood."

The powdered fruit and gum of the espino blanco (cratœgus oxycantha), enjoy the reputation of healing ulcers on the genitals and in the mouth, locally applied, while a soup made of the root is an infallible remedy for snake-bites. The patient is bathed in the soup, and given large doses of the same. The same soup is also beneficial in chronic coughs. The cimaba cedron is extensively used as an antiperiodic and an antidote to the bites of venomous snakes and rabid animals. I have used it as an antiperiodic in a large number of cases, and always with satisfactory results. I cannot, however, testify to its efficacy in pernicious fevers, as I have never been so placed that quinia was not at hand, and did not believe myself justified in experimenting where life was in danger. Those who may desire to test the usefulness of this drug can easily obtain samples of an excellent and reliable solid and fluid extract by addressing "Licenciado Eduardo Bendfeldt, Escuintla, Republica de Guatemala, Centro America."

"Friega-plato" is a plant, the botanical classification and the virtues of which I have not attempted to investigate, as it is claimed to infallibly cure syphilis, *even in poultry*. I am not only willing, but anxious to learn all that may help me to relieve the affection with which I have been most thrown in contact, and I pride myself that I have not treated a patient who has not enjoyed my fullest sympathy, yet I must confess that when hens act disreputably, I am not humanitarian enough to desire to relieve their sufferings otherwise than by instant death. "Friega-plato" I heard of through cases which came to me for treatment, and who had invariably used it ineffectually.

The actual cautery is used in snake bites, in malignant pustules, fungoid granulations and chronic ulcers. Broad pieces of iron and steel are also used for blistering, by heating them and holding them over the part affected until a large vesicle is produced.

The chick-pea (cicer arietinum), in decoction, is recommended as a vermicide, a diuretic, in gravel and stone.

Beeves' foot jelly is given convalescents, and is asserted to cure chronic metrorrhagias and fevers which are dependent upon debility.

Ginger, which grows wild in nearly all parts of Central America, and is almost invariably excellent, is recommended as a general tonic and to cure dropsies. In pleurisy, it is used externally, the powdered root being mixed with equal parts of black pepper, and made of the consistency of a plaster by adding albumen. It is then extended on a cloth and applied to the painful part.

Cochineal is said to be astringent, sedative (especially in children's coughs), diaphoretic and antiperiodic. It is also recommended in dysentery and threatened abortion. It is ground with equal parts of sugar, and 20 to 40 grains of the powder are given with simple or acidulated water.

Infusions of the flower, fruit and bark of the pomegranate are recommended in diarrhœas and leucorrhœas, and the derma of the fruit is powdered and given in twenty-four grain doses thrice daily, as an antiperiodic.

As a vermicide, it is used with frequent success as follows: Two ounces of the fresh epidermis of the pomegranate root are scraped into eighteen ounces of water. This is boiled down to twelve ounces, and eight tablespoonfuls are given every half hour, fasting.

A very complete account of the use of guaco in Central America is found on page 1659 of the U. S. Dispensatory, 1878. To this I would add that those who go into parts where snakes are said to abound, daily drink an ounce or two of the juice expressed from the gnaco leaves, and anoint their bodies with the same, claiming to thus enjoy immunity. It has also been used in the same way as a prophylactic against cholera.

Ox bile is considered a tonic for persons afflicted with any of the dyspepsias, and is said to cure jaundice. In either case twelve grains, partly dried in the sun and mixed with an equal quantity of soap, is made into pills and taken during the day.

It is dissolved in warm water and injected into the auditory canal, in suppurative otitis, "when the pus is yellow."

Iron filings are used in all possible affections, but are particularly recommended in dropsies, amenorrhœa, anæmia, hysteria, sterility, leucorrhœas and splenitis.

The filings are given in six-grain doses, mixed with sugar, twice daily, as a rule, and they are first exposed to the sun and dews on a white plate, for eight continuous days. They are then triturated with sugar and given as above detailed.

Castor oil, besides its usual employment, is praised as relieving the headache incidental to acute catarrhs, if a bandage is anointed with it and worn about the head for several days. A poultice is made of the beans, ground and mixed with oil, and is tied over the region of the spleen, to cure inflammation of this viscus.

All parts of the hypericum perforatum are used in infusion, one-quarter of an ounce of the chopped plant to each dose in hysteria, hypochondria, rheumatism and hæmoptysis.

Soot is given in drachm doses, in coffee, as a vermicide, and is beaten up with albumen and thus used in herpes and tinea.

Ants of all kinds are famed for their curative properties in impotency, apoplexy and dysuria, and to relieve paralyses. In the latter affection, they are crushed and applied as a poultice to the affected part. The sexual organs are said to receive additional vigor from being frequently rubbed with ant-oil, which is made by endeavoring to drown four ounces of ants in two ounces of any oil, sealing the bottle, and after exposure to the sun for twenty successive days, straining.

The "Spirit of ants," as it is called, is made by catching half a pound of ants during the "increasing quarter of the moon," in June or July, and soaking them for eight days, in twelve ounces of strong aguardiente, during which time they must be exposed to the solar rays from sunrise to sunset, and shaken every hour. The "spirit" is then filtered and given in 40 to 50 drop doses daily.

Eggs. The albumen mixed with water, with or without sugar, is prescribed in dysentery and in "biliousness." The ground shells are prescribed in about half drachm doses, twice a day, in pyrosis.

Goitre is very frequently seen in the mountainous districts of Central America, and I have known patients to anoint their bronchocele for months with a salve composed of two parts of eggs and one of fresh lard, without any benefit, of course. Yet they persist, notwithstanding their failure, and lay the flattering unction to their souls (and goitres) that they are doing the proper traditional thing.

The delicious flesh of the iguana (*I. tuberculata*, also called guana, huana, iguano and iguanha) is recommended in syphilis, especially in secondary eruptions. It is yet more highly lauded in cancer. Professionally, I have not used it, but unprofessionally have frequently eaten it, and consequently can recommend it to all as being far more delicious than frog's legs.

Magnetized iron is said to have relieved headaches, toothaches, and rheumatisms, by being passed over the painful parts.

Several species of gourds, called jicaros, are used in medicine. The rind is boiled, or the seeds emulsified, and the juice made into a sort of electuary. For all of these anti-syphilitic virtues are claimed. I have used them as expectorants, in those regions where drugs were few; I almost said "fortunately few."

The newt or Eft (Sp. lagartija), like nearly all of the lizards, is praised as a remedy in cancer, syphilis and skin diseases. Buboes are treated

by opening the thorax and abdomen of the lagartija and fastening it over the swollen gland, to die there. The skin, removed with the fat, is applied, while fresh, upon parts where foreign bodies have penetrated the skin.

Milk, as an aliment, is considered to produce intermittents, stupidity, sadness, indigestion, diarrhœa and constipation.

As a remedy, milk is used in poultices and fomentations, in preference to water ; it is given by the mouth and rectum in dysenteries and diarrhœas, in the latter with lime-water.

Whey "refreshes and softens the abdomen," therefore it is very useful in hot fevers, scurvy, epilepsy, insanity, and cancer of the breasts." In dysentery it is administered with manna, with tamarinds in bilious fevers, with alum in hemorrhages, with sulphur in itch and hemorrhoids, and warts wetted with whey are said to be cured.

Fresh cream is used in burns, scalds, and as a dressing to parts that have been blistered. It is usually applied on young plantain or banana leaves.

Goats' milk "does not cause sadness," and is frequently given to children and convalescents.

Mares' and asses' milk are much used by debilitated persons, and in extreme cases human milk is employed. The juice of lettuce, strained and given in three to six tablespoonful doses, is used as a sedative, but not with constant effect.

Lye of wood-ashes is employed in the bites of venomous reptiles and rabid animals, and the stings of insects. In scaly skin diseases, fissures of the skin and callosities, lye is used locally, while sarsaparilla, generally in decoction, is given, and the patient abstains from the use of pork, acid foods and spices.

That species of mistletoe which grows about orange-trees is praised as a remedy for epilepsy and nervous affections in general. It is dried and powdered, to be given in drachm doses twice daily.

Sweet limes, which to the foreigner taste like juicy, flavorless oranges, are much used in pyrosis, ardor urinæ, and in injections in colics. In "earache" some drops of sweet lime juice are instilled into the auditory canal, which is afterwards plugged with cotton.

It is considered a "cold remedy," consequently is prescribed in all affections concomitant with heat, whether atmospheric or personal.

Limes (*Citrus acris Miller*), of a most exquisite flavor, abound in nearly all parts of Central America, while the lemon is comparatively rare. As far as the range of pathology goes, the lime-juice is used both locally and internally. Its most frequent employment is in alopecia, affections of the eye—imagine lime juice squirted upon an inflamed conjunctiva!—scurvy, jaundice, and with wine in putrid fevers, cholera and all asthenic affections. An infusion of the bark and seeds is given as a stomachic and carminative.

In gastritis and enteritis, lime-ade with gum arabic is given, warm, in ounce doses, every two or three hours.

Slices of limes are tied upon the umbilicus in dysuria, and are similarly used upon buboes, but for this affection they are toasted before being applied.

Lime juice, mixed with wood-ashes, is rubbed upon inflamed joints.

After the Indians remove the jigger (nigua, chigoe, chique, sarco psylla penetrans) from their feet, they instill a few drops of lime-juice into the space left, and then fill it up with cigar or cigarette ashes. Whenever I performed this little operation upon myself, I omitted the lime-juice.

(To be Concluded.)

CLINICAL STUDY OF INEBRIETY—RATIONAL METHODS OF TREATMENT.

BY T. D. CROTHERS, M.D.,
Superintendent Walnut Lodge, Hartford, Conn.

The aim of all treatment is to build up healthy functional action of the mind and body. This will not follow from the applications of medical means alone, nor the absolute restraint of locks and bars, or by appeals to the will and emotional faculties.

Rational treatment for inebriates is simply rational means to meet diseased action along the line of laws and by the use of forces which may be understood. Take the question of the honor of the patient under treatment, his word or promise that he will not take spirits when he is exposed to temptation.

One class of observers are confident that the best results can only come from a full coöperation of the patient, and by placing him on his honor, thus stimulating the will to guide and restrain the diseased impulses. Other persons equally competent deny the value of such means, and under no conditions and circumstances depend on the honor or will of the patient, but insist that his will is injured by stimulating it in this way. Yet as a rule all patients are clamorous, after a few weeks' treatment, to be trusted, as if they would like to see how far they could go and not fall.

In many cases the nervous paroxysm previously mentioned takes this form of excitement, insisting that restraint indicates want of confidence, hence depression, wounded pride and ambition to help themselves and self-confidence to go alone, etc. Both of these views come from a limited knowledge of the whole subject, and both are therapeutically true in practice. In insanity, the will power or honor of the patients are rarely considered as a factor in the treatment, but in inebriety it is all important to take into consideration this element, and how far it influences the organism. Inebriety cannot be measured by the same standards of treatment that other disorders of the nervous system are, for the reason that it is a disease "on the border land," with a large physical element entering into every phase of its progress.

In many cases, after a few weeks' treatment, an irritative depression follows, from the application of restraint, which may not only provoke periods of nervous agitation, but counteract much of the good accomplished by other means.

When this continues for some time, a low form of delirium, with delusions, is apt to follow. The patient will intrigue to procure spirits, and have no ambition to aid or help the work of the physicians for himself and others. He will display a compound of reckless abandonment and mental feebleness, that seems beyond the reach of medicines. The treatment in such cases is of little value; after a few months he is discharged, and relapses at once, reporting the most willful falsehoods of the asylum work and its principles. This irritative depression in some cases never passes away entirely while under restraint, and may be a hint of continuous craving for spirits. Or it may be the result of continuous restraint and want of confidence in the patient's strength to help himself, or the absence of means applied to rouse up the will to greater exertions to aid the physician. If at the beginning of this condition the restraint is modified at certain times of the day, when the danger was least, as, for instance, for a few hours after each meal, it might disappear at once. The restraint in many cases should be varied; when in certain conditions the patient shows depressing excitement, he should be sent out on some errand or duty in which a certain dependence is placed on his honor to return at the time mentioned. This duty should be in the least exposed places, and one that demands exactness and punctuality.

This cannot be strictly called trusting to the honor of the patient, because it is coupled with some duty and work. The mind is not free to follow its own dictates, but is free to carry out the will of another. The application of restraint and trusting to the will of the patient may be illustrated in some cases from the daily records of the asylum.

Case 1 became very restless and excited at the absolute restraint which was continued many weeks after admission. This state developed into a low, nervous melancholy, which disappeared soon after he was given the daily task of procuring milk for the house, a mile away. The liberty and duty of this work was a constant tonic to his mind.

Case 2 showed marked signs of nervous irritation and exhaustion, suffering from frequent recurring paroxysms of restlessness, which passed away when he was sent on an errand with a carriage, daily, to the depot.

Case 3 was like the above, who was benefited by placing another patient under his care, for a walk about the country.

Case 4 at times was sent to the city on real and imaginary errands, with great benefit.

Case 5 was a dypsomaniac, and after the paroxysm, was given liberty to go and come at certain hours, and required to be exact and punctual. On the approach of the paroxysm he gave up to the restraint, and requested to be particularly cared for when the feeling had passed, and he went about as before.

Case 6 was a chronic of many years' duration, who at certain times, governed by his general physical condition, was trusted to go to the city on business. Within an hour after his return he sometimes became restless and needed positive restraint. The application of restraint and liberty alternately was followed by the best results, and finally a cure.

In these and other cases the value of liberty or modified restraint was governed by the condition of the patient and his apparent capacity to control himself.

This can be ascertained after some study and acquaintance with the patient, and is revealed by certain almost indescribable signs and symptoms, which are more or less certain and rarely misunderstood. The aim of the physician is to hold the patient and govern his surroundings with restraint enough to keep him from danger, and at the same time have his full coöperation and confidence. If this restraint is arbitrary, and not adjusted to the conditions of the case, it is irritating and damaging to the nervous system of the patient. At times it is stimulating and then it is depressing and injurious.

These are the cases that in a few instances do well by simply trusting to their honor or word that they will stop the use of spirits. It will be found that they are nearly all inebriates in which the use of alcohol was only a secondary exciting cause, and that some other morbid condition of body and mind provoked the use of alcohol.

In an asylum these conditions and actual causes are in a measure removed. Hence the little danger from the secondary cause, alcohol. In a certain case, where digestive troubles brought on the inebriety, the patient never drank, and was free from all danger of relapse as long as the stomach did its work properly. The moment an attack of indigestion came on he would give way to the least temptation. In another case, a man whose domestic relations are unpleasant will come to the asylum, and go about with full liberty in a day or so, and remain months perfectly sober, although frequently exposed to temptation. In three or four days after his return home he will relapse and make great exertions to procure spirits. Here the exciting cause was probably exhaustion, from mental irritation, from domestic trouble, which reacted in a desire for spirits.

There is another class who constantly relapse, under all circumstances, and who have no honor or pride that can be reached by trust. To them nothing but constant, sharp restraint is recogn zed as an effectual treatment. As a class they will be found inheriting a well-defined insane, and often an epileptic neurosis. Of defective brain and nerve power, they are usually chronic cases, of many years duration. They are among the repeaters who appear at all the asylums in the country, and relapse after all treatment, from the slightest occasion. They always manifest delusions of strength, and at the asylum are full of intrigue, and violate all confidence, relapsing with every chance. To them nothing but military discipline, that is exact and positive, is effectual. They must have removal from all exciting and predisposing influences, and every surrounding replaced by conditions of duty that is absolute. For instance, rules regulating their daily habits of life, medicines and other treatment to be given at different times, and all their work, and every event, regulated with mathematical precision; nothing trusted to their will. Such cases in the asylum, under a firm, sharp control, give way quickly and feel the stimulus of the place and management as a bracing tonic, which, if continued long enough is an important factor in their permanent recovery. These cases sometimes are benefited by the discipline of sea service, or roused up to make greater exertions by some enforced duty. Like all other cases, they are much exhausted, needing rest, building up, with the vigorous mental tonics. The following cases will exhibit some of the usual methods and results which follow from their treatment in asylums.

Case 1, with a marked inebriate inheritance, drank from puberty up to forty-five years of age. At this time he came to the asylum, and after several trials and relapses he was placed on a military system, which grew more rigid as he failed to meet its requirements. Under this he made a rapid recovery, and one year after went into the country house of his brother, who was very exact and positive in his requirements, and to-day is yet temperate and well. He has learned exact habits of life, and fully realizes their value in his case.

Case 2 was a chronic case, dating from a physical origin. He was with much difficulty kept under discipline, and relapsed with every opportunity, but was more easily managed in a semi-military system. He obeyed promptly all requirements when they were urged upon him, and had no disposition to vary as long as the laws and rules were strict. A few months after he went to work on a salary, but could never be trusted to go and come from the office to his home unless with some one.

Case 3 was a secret inebriate with a marked inheritance of insanity, who lived a double life of assumed temperance, but drank constantly in secret. At the asylum he apparently was the most anxious to recover, yet all the time resorted to every method to procure spirits. Every restraint was cheerfully accepted, and every liberty observed with outward care, and yet he always was ready to relapse with every chance. Finally he was placed under the most absolute restraint and watching; he changed at once, and was greatly improved. From this time nothing but the force of restraint that was thorough commanded his respect. If he brought in spirits he expected to suffer for it, and would do it again unless he was under sharp restraint. He seemed to need some combative force outside of his will to resist the use of spirits. These cases are generally incurables, or incapable of self control, and, like soldiers in an army, may be valuable to execute the will of another, and, under certain conditions, carry out a plan of treatment which will result in their temporary benefit.

No matter what the exciting or predisposing influences may have been, the treatment must be

based on restraint that is absolute and does not recognize the power of the patient to help himself. There seems to be a general enfeeblement, amounting almost to paralysis of the controlling power of the brain, which nothing but the will of another can direct or stimulate. The application of restraint for these two classes varies widely, and must depend on the character of the patient and the form of inebriety. In the absence of proper classification and knowledge of these cases they are treated alike, either trusting to their honor to a certain extent, or placing them well under absolute restraint, and the results are unsatisfactory. The superintendents of insane asylums who have a ward for this class, and treat them by absolute restraint, as the insane are, manifest surprise to find that many of them relapse as soon as released, and hence conclude that they are more vicious than diseased. They never realize that their treatment of these cases has been injurious and served to continue the very conditions which it sought to obviate. On the other hand, those who rely on the honor of the patient are continually amazed that so many cases relapse on every occasion, and seem to have no control over themselves. From this they conclude that nothing but supernatural means, from prayer or conversion, can avail, or that they are incorrigibly wicked, and must be punished in jails and prisons. The conclusion from the facts is, that a careful study of each case will point out the degree of restraint and liberty necessary to rouse up the organism to healthy activity. Also, that an asylum should be prepared to apply to each case the degree and form of restraint required, in surroundings that will be effectual. Not unfrequently a class of patients are seen who have a strong tinge of insanity. They are wildly delirious when intoxicated, and are always possessed of positive delusions. They are often kleptomaniacs, and generally more noted for their nerve instability and uncertain mental action. The treatment of this class presents many problems that turn on a thorough acquaintance with the history and nature of the case. Absolute rest and freedom from change are required in such cases, in addition to active medication, of which baths, the electric current, bitter tonics, are most valuable. They are made worse by excitement or appeals to their pride or honor. A private asylum is often the best place, for the reason that more positive quiet and rest can be had; also in many cases the active causes which are not forms of alcohol, can be removed more positively. These cases are most frequently inebriates because of some almost accidental physical condition, which gives the organism a direction towards inebriety. When crime is committed by this class, punishment in jails is always fatal, in the sense of precipitating them into more incurable conditions, or developing some form of insanity from which recovery is doubtful. In asylums the results of treatment are generally promising, but final cure depends on years of quietness and medical care under the direction of another. They are on that mysterious border land that divides sanity from insanity, where all human actions and judgments are uncertain. Often they are mere victims of the surroundings and conditions of living that change with these influences. In many cases marked intellectual disturbances precede the use of alcohol, and inebriety is the result of these defects. For instance, a hypochondriac will reason that alcohol contains some food element needed in the body, and as the natural consequences of his experiment, he is soon an inebriate. At the asylum the treatment must have special reference to these mental changes. Peculiar mental conditions may appear after inebriety has come on, and in the treatment must be recognized and studied. As an instance, a patient has intense egotism and confidence in his ability to perform things that are almost impossible. He reasons keenly that his inebriety is the result of some special physical condition which can be readily removed.

In the treatment an advisory control is assumed, and only absolute restraint is exercised when essential. Great care is necessary to make the methods of using remedies impressive and exact, and to magnify their importance and the results to be accomplished on the patient's mind.

Delusions of persecution are common, and although less pronounced than in the insane, have an important bearing on the progress of the case. Dietetic delusions are also common, and persistent.

The impulses to overeat or to use some one article of food to satiety, are common. The inordinate thirst at times, like a form of mania, takes possession of the mind; all these are factors, whose removal and care requires the attention of physicians.

The success of all treatment depends on a knowledge of the mental and physical conditions present, and the administration of remedies and measures which will meet and break up these conditions.

—Dr. Dorin has just died, at Châlons-sur-Marne, nearly ninety-four years old.

A PAINFUL SCAR REMOVED FROM A THIGH-STUMP, AND ITS SITE COVERED BY A TRANSPLANTED FLAP.

BY J. S. WIGHT, M.D.,

Professor of Operative and Clinical Surgery at the Long Island College Hospital.

A. L. Gagnon, M.D., of Massena, N. Y., in active professional business, married, and forty-five years of age, on the evening of the 25th of August, 1879, was kicked on the calf of his left leg, by a vicious horse, so that there was a compound comminuted fracture of both bones of the leg. An effort to save the limb failed; gangrene supervened about the seventh day after the injury. The leg was amputated on the 2d of September, about five inches below the knee joint. The ligature on the anterior tibial artery included the accompanying nerve, and was removed about ten months after the amputation. The posterior flap sloughed, but in about six months healed up, leaving a large scar. In the meantime, pieces of dead bone came out.

On 16th of November, 1880, the limb was amputated again. An anterior flap, four inches long, was made; there was no posterior flap made; and the extremities of the condyles were cut off, leaving on the inside of the stump a sharp prominence of bone. The operation was performed after the method of Carden. There was severe hemorrhage during the night, and the next morning there was great tension on the stitches, so much so that they were cutting their way out. The flaps were opened, when it was found that the blood came from the articular arteries. The posterior tegumentary tissues retracted very much, leaving a large space to heal by granulation; union was not complete till the next June, some seven months after the amputation; during all this time the pain was severe and constant. But after the amputation wound healed up, the pain was severer than before, requiring large doses of morphine for its alleviation. In the meantime the doctor attended some office and some general business. Gave up the use of morphine in September, 1881, and resumed its use again in March, 1882.

In November, 1880, the Doctor went to Montreal and consulted Prof. Fenwick, who advised resection of the stump of the first amputation. The operation was not performed. In July, 1881, the Doctor consulted Prof. Fenwick the second time, while the stump of the second amputation was healing, after a temporary ulceration. An operation was not advisable at that time.

In July, 1882, the Doctor saw Prof. Hamilton, of New York, in regard to this very painful stump. The Professor was inclined to let the stump alone; but was willing to operate at the Doctor's request; yet he did not think an operation would do much good.

On the 11th July, 1882, the Doctor came to my office to consult me about his painful stump. My advice was to submit to one of two operations: (1) To have a thorough resection of the stump, in fact, a reamputation, leaving abundant flaps; or, (2) To cut off the painful scar-tissue, remove the projecting part of the internal condyle, and bring down from the thigh above a flap to cover the place whence the scar was to be removed. The doctor did not desire a reamputation, but preferred the plastic operation, which I performed on the 13th July, 1882, assisted by Drs. Burge, Snively, Brown and Dickinson, in the following manner: The healthy and normal integument still covering the internal condyle was detached from the condyle, by means of a semi-circular incision, far enough to permit the removal by the saw of a piece of bone, one and one half inch in diameter and over one-half inch in thickness, leaving a smooth surface of cancellous bone on a line with the shaft of the femur. There was normal integument enough to cover this surface. The scar and subjacent bone on the posterior aspect of the stump were removed by the knife and saw, the piece being about one and one-half inch in diameter and about one-half inch in thickness, leaving a smooth surface of cancellous bone on a line with the shaft of the femur. This surface was covered by a large flap taken from the posterior aspect of the thigh above. An incision was made upward on the outer and posterior aspect of the thigh, about six inches. Then the incision was carried downward and inward about three and one half inches, leaving a very broad pedicle to a large quadrangular flap. The edge of the flap looking outward was brought down and stitched to the edge of the integument across the posterior edge of the end of the stump, the entire end of the stump having an excellent covering of normal integument. A moderate-sized space was left above, on the posterior aspect of the thigh, where the flap came from, that was uncovered by integument.

The following points in the subsequent history of this case may be noted:—

1. The morphine habit of the patient was such that, on the 17th July, for instance, three grs. of morphine were administered hypodermically.

From this time till the 27th of July the morphine was daily diminished. Pure water was injected hypodermically in place of the solution of morphine, from time to time, and after the 27th of July all morphine was withheld, and the injections of pure water continued. On the 10th of August the patient was informed of the fact that he had not had any morphine for the previous two weeks, and then he concluded that he did not need any more, as he was doing so well without it. I am indebted to Dr. Brown for the faithful carrying out of this part of the treatme

2. A small portion of the transplanted flap sloughed away about the 20th of July, leaving enough tegumentary tissue to cover the posterior surface of the end of the stump, so as to have only a line of scar-tissue across the posterior border of the stump end, where the large and painful scar was before the plastic operation. By continuous and daily application of adhesive straps the tegumentary covering on the stump end was carried somewhat backward and upward, to meet more completely the edge of the transplanted flap. Also the tegumentary edges above were more and more approximated, till they nearly came together.

3. On the 15th of August the Doctor left the hospital and went home. For some days before going he had walked with his crutches about the hospital, and the grounds of the hospital, and had visited some friends in the city. His general condition had improved very much during his stay in the hospital. He had been greatly relieved from pain, and the future looked bright and more hopeful. He had now a stump, or would have when it was all healed, to which an artificial limb could be fitted. Some time after the Doctor reached home he wrote me a thankful letter, informing me of the good progress he was making. And at the present I think I may write that the case has turned out far better than I could possibly expect. And if another case of painful stump presents itself, I will venture to perform another plastic operation.

—The death of M. Davaine, well-known from his discovery of the bacillus of "Charbon," is announced. Many of his most important works won for him prizes from the Acadèmie des Sciences; among the most important are his *Traité des Maladies vermineuses chez l'Homme et les Animaux;* a *Memoire sur la Contagion du Charbon chez les Animaux;* and *Travaux sur la Septicémie.*

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINICAL LECTURE BY WILLIAM PEPPER, M.D., LL D.,
Professor of Clinical Medicine.
Reported by Wm. H. Morrison, M.D.

Cancer of the Stomach.—Gentlemen:—I had until recently under my care a lady of about middle age, suffering from tinnitus in the left ear, evidently depending upon some subacute inflammatory change in the middle ear. At times, it seemed to threaten development into Menière's disease, *i. e.*, attacks of vertigo associated with tinnitus, but I cannot say that it ever fully assumed this character. She appeared to be benefited by a course of treatment which consisted in careful attention to hygiene and diet, the prolonged use of quinia with iodide of potassium and counter irritation over the mastoid process and the nape of the neck.

Last spring, while feeling unusually well, she began to complain of a great deal of gastric distress. This was most marked after eating. It appeared to be relieved by a prescription containing pepsin, and the omission of all other remedies, but it soon returned. There was never any vomiting. Examination of the abdomen showed tenderness, but no thickening or hardening could be detected. She came of a healthy family, her mother living to the age of 82, and as far as could be discovered, no member of the family had suffered from malignant disease. There had been no sufficient cause to explain the development of gastric pain; and I therefore, for a time, hoped that it might prove to be a case of gastralgia, which her anæmic condition rendered not improbable. I had, however, observed that it differed from a gastralgia in two particulars. In the first place, the taking of food, instead of affording relief, increased the distress. In simple neuralgia of the stomach, we generally find that the ingestion of food relieves the pain, which again appears as the stomach becomes empty. In the second place, the pain was constant, instead of being paroxysmal, as is usual in gastralgia. I therefore suspected the existence of a gastric ulcer. There was, however, no vomiting, the amount of tenderness was not extreme and the occurrence of simple gastric ulcer in a woman whose surroundings were favorable, who had good food, and who was free from all care, is unusual. × × ×

I refer to this case particularly, because we, as physicians are so much in danger of overlooking those grave diseases which develop in our patients immediately under our eyes. We may be attending a patient for some condition, and he begins to complain of this or that symptom. It is either treated lightly or referred to the existing disease. In this way grave diseases sometimes develop, while the physician in attendance does not recognize them, or attributes the symptoms to some preëxisting condition.

As the spring went on, finding my attempts to relieve this pain were unsuccessful, I put the pa-

tient to bed and gave her an exclusive diet of milk, in small quantities at short intervals. I also gave her alteratives, such as bismuth, nitrate of silver, minute doses of carbolic acid, with soda, valerianate of zinc and various other preparations, hoping to relieve the gastric distress; but nothing afforded relief, and she became thinner and thinner. About the middle of June I went away, leaving her under the care of Dr. James Tyson and Dr. Judson Daland. When I returned I found that she had died, and that an autopsy had been held, and that the specimen now before you had been removed.

I propose to examine this with you to-day. The case, as you will have inferred, proved to be one of malignant disease of the stomach. On examining the stomach, I find a number of ovoid masses. I wet one of these and it presents the appearance of a round-cell sarcoma, but a naked eye examination is not sufficient to decide this point. It is, however, some form of neoplasm. I may as well say here that you will often be struck, no doubt, with the laxity with which I use the terms sarcoma and carcinoma in my clinical lectures. The truth is, that the differences between these growths and their minute sub-divisions, as they affect internal organs, is a matter of far greater consequence to you as microscopists and pathologists, than it is to you as physicians. You have a patient in whom the symptoms and the progress of the case show conclusively that some neoplasm has developed in the stomach. That growth is going to kill the patient. The question whether it is an epithelioma, a cylindroma, a carcinoma, or a sarcoma, while of interest in the subsequent microscopical examination, does not alter the prognosis or influence the treatment. I do not use these terms in this manner because I disregard the importance of the study of these minute distinctions between the different forms of tumors: for these distinctions are of extreme importance when we come to consider tumors involving the superficial parts, where they are open to digital examination and operative interference. There we have a different history as regards recurrence after operation, as regards the tendency to extend to adjacent parts, and as regards the formation of secondary multiple growths. A consideration of the minute anatomy is of great importance in external tumors, but in the case of neoplasms affecting internal organs, as the liver and stomach, the same importance does not attach to these minute differences, nor are we able to make them.

As I have said, there is hypertrophy of the glands lying in the curvature of the stomach. This enlargement of the glands extends downward, involving the glands around the aorta and along the spinal column. On section they all present the same general characteristics. They are grayish yellow, sometimes of a pinkish tinge, fleshy, without much juice on scraping, and evidently the seat of some neoplasm.

The stomach itself has undergone remarkable changes. It is exceedingly small, and looks like a contracted, old, diseased, urinary bladder. If filled to its utmost capacity, it would not contain four fluid ounces. The inner surface is discolored and presents a worm-eaten, trabeculated appearance. The walls are thick and rigid. On section they are found to be extensively diseased and the seat of malignant infiltration. There is fusion of the coats of the organ, particularly of the peritoneal, sub-peritoneal and muscular tunics, the mucous coat being less affected than the others. The external and middle tunics are fused into a hard, gristly mass, not less than one-third of an inch in thickness. There is not as much hypertrophy of the muscular layer as we often find, especially in cases where there has been pyloric obstruction. In the present instance the pyloric orifice is not at all obstructed. It is sufficiently large to admit the thumb. As I have said, the mucous membrane is much less involved than the external coats. There is no ulceration of the stomach, and no fungous mass projecting into the organ. This is a remarkable case, and the appearances presented are very unusual.

You see how they account for the symptoms described. There was no pyloric obstruction, and there was, therefore, no vomiting. Vomiting, in cancer of the stomach, occurs most commonly as the result of the attempt of the organ to propel its contents through an obstructed pylorus. This is the reason why the vomiting presents the peculiarities of coming on a certain interval after the ingestion of food, of occurring when the food has reached a certain stage of digestion, and of being followed by complete relief. In other cases of gastric cancer, there is an ulcerated, irritable surface, and the contact of the food against this surface excites vomiting. In such case, the vomiting resembles that which ordinarily occurs in simple gastric ulcer. There was here neither pyloric obstruction nor ulceration of the mucous membrane.

Again, I never was able to feel any lumps or hardening in the epigastrium, on the most careful palpation. The stomach was so contracted that it must have been far back and above the margin of the ribs. Towards the very close of the case, Dr. Tyson thought that he could detect a tumor. This is often the case. While during the earlier periods, and on towards the close, no tumor can be felt, yet, when the patient emaciates to the last degree, and you are able to press your fingers against the spinal column, you may then find a tumor; but in some cases where the glands were not much enlarged, I have felt until the day of death, and have been unable to discover any tumor in the epigastrium.

When you come to study closely the diagnosis between cancer of the stomach, simple ulcer of the stomach, and chronic catarrhal inflammation of the stomach, you will find that there may be in all of these pain, progressive wasting and anæmia, and you turn to the question whether there is vomiting of such character as to indicate mechanical obstruction or ulceration, and whether a careful examination reveals hardening, thickening or a definite tumor, in order to establish the diagnosis. If in the present instance you had depended on these points, the diagnosis would have been simple ulcer, or chronic catarrh. You can easily see, from this specimen, that in a certain proportion of cases you will have to base the diagnosis upon the age of the patient and the steadily progressive, down-

ward course, despite hygiene, dietetic regimen and judicious therapeutics. You do those things which, if it were a case of simple ulcer or of chronic catarrh, would be beneficial, yet you obtain no improvement, or, at the most, but a slight effect. The therapeutic test in connection with the steady march of the case and the age of the patient, will in some cases constitute the sole basis of the diagnosis between malignant disease and simple ulcer and chronic catarrh.

~~I shall have these tumors examined by the microscope and report the result.~~

Calculous Pyelitis.

Our next patient is this man, 50 years of age, a native of Massachusetts, but who has been pursuing his occupation of shoe-cutter in this city. His habits have been fairly good. He has used malt liquors moderately. Five and a half years ago he contracted syphilis. This was followed by secondary symptoms. There is no history of hereditary disease on the father's side, but on the mother's side we have a rheumatic history. Ten years ago appear to have occurred the first symptoms which bear upon the present condition; at that time he had dull, burning pain in the lumbar region, burning on micturition and a deposit of brick-dust sediment in the urine. There is no history of any unusual exposure. The attack lasted six months, when he seemed to get perfectly well, and from that time until two years ago he had but little trouble; at that time the same condition returned. I do not find anything in the history of his manner of living, habits of drinking, or of any previous attack of disease, bearing upon this subject, with the single exception that on the mother's side we find the history of a well-marked rheumatic diathesis. His mother died of dysentery, but had passed blood with the urine and had suffered from occasional attacks of gravel. This is the only thing in the history bearing upon these attacks of gravel, with the discharge of uric acid and urates, from which he has suffered.

In addition to the pain, he has noticed the discharge of blood with the urine, in the form of little clots. The pain was usually dull; it never ran into the testicle; it was always worse on the left side and was occasionally accompanied by a sharp pain in the left renal region. During the past year he has been obliged to get up from two to four times during the night to urinate, the passage of urine being accompanied by scalding pain, which was at times very severe. For the past two months there has been a good deal of headache, with beating and throbbing over the back of the head.

Although the appetite has remained good, yet during the last two years he has lost twenty-five pounds in weight. There has been no vomiting. The heart and lungs are normal.

The urine is turbid and there is at the bottom a heavy, smoky deposit. A more recent specimen does not look so bad. Under the microscope the first specimen shows a great deal of blood, a moderate amount of pus, not much mucus, and a few crystalline elements. Some of the pus is old and granulated, and with it there are a few large masses, composed entirely of granular matter, looking like the compound granule cell which is found in old inflammatory exudations. They may be these cells, or they may be large, spherical masses, of granules of urates. It will require a careful chemical examination to decide this. The blood is not much altered in character. He has never passed little pieces of stone.

The most probable condition which would explain such a history is that of a gouty diathesis, with the formation in the kidney, from time to time, of deposits of uric acid and urates, and the formation, more recently, of a deposit of such large size that it cannot escape through the ureter, but is retained in the pelvis of the left kidney, where it has set up an inflammation of the pelvis, causing calculous pyelitis.

This is the most probable explanation of his symptoms, but as he has lost so much flesh, and has such an anæmic and cachectic appearance, it is necessary to examine him carefully, in order to be sure that there is nothing more serious than the disease of the kidney. I find a moderate amount of tenderness over the kidneys, especially over the left kidney. He has not noticed that sudden jars give rise to pain in the renal region, but they do cause distress in the epigastrium. It is not impossible that this pain is connected with the inflammation of the kidney. A deep-seated epigastric pain is sometimes seen in cases of calculous pyelitis; more commonly, you will find that the pain is distinctly referred to the renal region, and patients complain that riding in a jolting car, or over a rough road, or jarring the foot, excites pain in the region of the kidney.

After a careful examination, I can find no reason to suspect any more serious disease than the inflammation of the pelvis of the kidney. Of that I think there is no doubt.

In reference to the urine in calculous pyelitis, it always contains pus in varying quantities. It is not uncommon to find a layer of pus one-eighth to one-quarter of an inch thick in the bottom of an eight f℥ bottle of urine. This is unlike the pus of cystitis, which is mixed with so much mucus that if the bottle is shaken it floats as an almost solid mass through the urine. In calculous pyelitis, the pus is not associated with any large quantity of mucus, and is easily diffused through the urine, rendering it turbid. Blood is frequently present, in consequence of the laceration of the vessels of the delicate mucous lining of the kidney by the calculus. The amount of blood is usually moderate, but occasionally there is a marked tendency to hemorrhage. It may appear in the form of clots moulded in the ureter, but is usually diffused through the urine. On microscopical examination, you find the blood corpuscles exhibiting evidences of having been acted on by the urine, some being crenated, others large and swollen, with their color removed by the urine. Albumen is always found, but its amount is small. It differs in this respect from the albumen in Bright's disease, where the amount is often considerable. In calculous pyelitis, the amount of albumen bears a definite relation to the amount of pus and blood. Where pus exists you will always find albumen, because the liquid in which the pus corpuscles float contains albumen. The same is true of the blood, the liquor sanguinis containing albumen. Where

there are both pus and blood, there may be considerable albumen.

No tube-casts are found. Occasionally in such cases there will be found transparent cylindrical bodies looking like tube-casts, and I presume that they do sometimes come from the tubules of the kidney. They are casts of mucin and of coagulable fibrinogenous matter. They are rarely present and are not associated with evidences of granular change, and contain no imbedded epithelial cells, as is seen in Bright's disease.

In calculous pyelitis there is no dropsy, unless the patient has become very anæmic. There may then be a little puffiness around the ankles on standing or walking. There are none of the secondary changes which are often associated with organic disease of the kidney, such as affections of the heart, retina and other organs.

Therefore, in a case of this kind, if you can eliminate cystitis, it will be easy to eliminate all the forms of Bright's disease.

The treatment of such a case must of necessity be unsatisfactory. It is impossible to dissolve the stone and thus get rid of it. You can hope only to prevent its increase in size, and that thus it will slowly disintegrate, be broken down, and come away in the form of minute granular debris. This does sometimes occur. The way in which we should be most likely to accomplish such a result would be by keeping the urine free from acidity, by preventing an excess of uric acid and acid urates in the system, by promoting rest, so that there should be as small a degree of inflammation as was possible, thus lessening the formation of lymph and pus which might become attached to the stone, leading to its increase in size.

At the bottom of successful treatment is a proper diet. If there is a decided tendency to an excess of urates, if the diathesis is marked, if the habits have been bad, if there has been indulgence in malt liquors to a considerable extent, a radical change will be required. Under such circumstances, if the patient is not very anæmic, a diet of vegetables and milk will be found of benefit. I think that animal food, and especially red meats, should be avoided as much as possible. The white meats may be occasionally allowed. Malt liquors and, in fact, alcohol in every form, should be entirely avoided. All articles of food which task the liver and disorder its action, as the oils and sugars, should be omitted; for we find that where the function of the liver is inadequately performed, there is a greater tendency to the discharge of urates and uric acid than is the case where the liver is acting freely. The diet must, however, be nutritious, for such patients are suffering from a chronic wasting disease, and are always anæmic. They bear a full diet of a suitable character. A diet consisting of the farinacea, milk, vegetables, broths and a small amount of meat, is the best. It is well to give three meals a day and a quart of buttermilk during the day, between meals. These patients must have absolute rest. It is useless for them to try to earn their living by hard work, for this increases the discharge of urates and causes fresh trouble. They should live in an equable climate. If they cannot change their residence, they must remain within doors in stormy weather. In addition to diet and rest, benefit will be derived from the use of alkaline diuretic waters. Some of these have a reputation as solvents for calculi, but I do not believe that any drug or any water has such an action. I believe that when the stone disappears, it is by a gradual disintegration. Undoubtedly these waters, by rendering the urine alkaline and increasing its quantity, will tend to prevent any deposition on the stone. At the same time, the discharge of this large quantity of urine is soothing to the mucous membrane, and tends to allay inflammation. Such waters as the Vichy, either the imported or the Saratoga Vichy, Bethesda, Wickasan, Pollen, and other waters of this class, are very useful. Many of these contain only a small quantity of mineral ingredients, but such as it is is alkaline, and is dissolved in a water of such purity and of such a pleasant character that patients can take large quantities of it. If the urine is decidedly acid, it requires a water containing a considerable quantity of alkaline salts, as the Vichy. If the urine is nearly neutral, a milder water will answer.

You will derive benefit from the use of alterative substances which, by being eliminated by the kidney have a good effect on the inflamed mucous membrane. If there is much pain and irritation, and a good deal of purulent discharge, uva-ursi, buchu, and drugs of that class will be found of service. You can change from one to another of these drugs, as may be necessary. They may be combined advantageously with alkalies, if you do not employ the alkaline waters. The bicarbonate of soda in combination with fluid extract of buchu constitutes a good alterative and alkaline remedy for these cases.

The amount of pain sometimes requires the use of an antispasmodic. Of these, the best is belladonna, which may be combined with the buchu. I have not found it necessary to use opiates, and, indeed, I should dread their use in such chronic cases as these. I have not had the same benefit from hyoscyamus and conium as from belladonna.

These patients often require a tonic and nutrient treatment, and no drug is more frequently called for than iron. It is difficult to say why a disease of this kind should be attended with such anæmia, yet, as a matter of fact, iron is usually indicated. In cases where the appetite and digestion are poor, the bitter tonics and mineral acids should be employed.

I shall put this man on the diet I have suggested, and let him keep at rest. I shall give him a teaspoonful of the effervescing, granulated, Vichy salt, in a glass of hot water, about two hours after each meal. The prima via will then be alkaline, and the water will be readily absorbed.

He will receive the following pill:—

℞.	Quiniæ vel cinchonidiæ sulph.,	gr.j
	Ferri et potassii tartratis,	gr.ij
	Acidi arseniosi,	gr.$\frac{1}{50}$
	Extracti ignatiæ,	gr.$\frac{1}{4}$
	Extracti belladonnæ,	gr.$\frac{1}{8}$
	Extracti gentianæ,	gr.j. M.

Ft. pil. No. 1.

Sig.—To be taken after each meal.

Lastly, counter irritation is of decided benefit

in these cases. I should advise counter-irritation, either by the application of antimonial ointment, or of dilute Croton oil, or of that which I believe to be the best counter-irritant in all deep-seated lesions, and the most agreeable to the patient, the actual cautery. I shall touch the skin over the kidney with the hot iron, which will keep up a counter-irritant effect for three weeks.

I shall have this man carefully weighed, continue this treatment for three weeks, and then see what effect it has produced.

Medical Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, October 9th, 1882. The President, Dr. Jas. Tyson, in the chair.

Myxomatous Tumor of the Posterior Cervical Region.

Presented by Dr. Nancrede, for Dr. W. G. MacConnell.

The tumor was removed by Dr. J. H. Brinton, at the Jefferson College Hospital Clinic, some ten days since. The patient was a little boy, aged four years, whose parents had first noticed the growth about two years ago. Latterly it has grown with considerable rapidity. It was of firm consistence, lobulated and movable beneath the skin, giving the impression that it was a fibrous tumor. After removal, in addition to the above mentioned characteristics, it was found surrounded by a capsule, and on section looked somewhat suggestive of myxoma, still it was thought by some to be merely a fatty tumor, containing more fibrous tissue than usual.

Microscopic Examination by Dr. MacConnell.—Upon examining a frozen section stained with iodine, meshes of capillaries are seen, in the walls of which the endothelial cells composing the vessels can be distinctly seen. The aforesaid meshes contain the mucoid structure traversed by large, pale, fusiform cells, the processes of which anastomose with each other. In addition many leucocytes are seen, and interspersing the growth, in every direction numerous yellow elastic fibres are readily distinguished.

When presenting this specimen Dr. Nancrede commented on the rarity of such growths.

Dr. S. W. Gross said he had himself presented several gelatinous polypi of the nose, a number of years ago, which were most characteristic examples of myxomatous tissue. He could also recall a specimen of subcutaneous myxoma of the forearm, as well as the hæmatoid myxoma of the breast referred to by Dr. Nancrede. He was disposed to consider it the rarest of all neoplasms of the breast; indeed, he had never personally met with one, and when preparing his work on tumors of the breast, he had written to numerous surgeons throughout the country, who all replied that they had never met with one affecting the breast.

Dr. Formad remarked that he had exhibited a myxomatous fibroma of the labium some years since, and said that the peculiar milky appearance assumed by the fluid when such growths were thrown into alcohol was a good diagnostic point.

Dr. Shakespeare said that his personal experience as to the rarity coincided with that of Dr. Gross. This specimen is one of the rarest forms, as most of the fibrilla consist of yellow elastic tissue. The rarity of myxomatous tumors seems to him to have much bearing on the views of Cohnheim and others as to the etiology of tumors. The observers insist that all tumors spring from the remains of fœtal tissues not made use of in tissue construction, which remain dormant in their embryonal condition until subjected to some irritation, when they develop into the various neoplasms. Now, tissue practically identical with that found in myxomata pervades the fœtus. How, then, is it that portions of this do not remain, to give rise to myxomata? On the contrary myxomata are among the rarest of the neoplasms.

Specimens from a Man who Died with Brain, Lung, Heart, Liver, Spleen, Kidney and Bladder Lesions.

Presented by Dr. J. T. Eskridge.

The specimens showing the above lesions were removed from the body of a man aged 68 years. The patient had become deaf in the right ear thirty years before, while suffering from some brain disturbance. Attacks of jaundice, with gradually increasing permanent discoloration of the skin, had extended over a period of ten years. Since the early part of the year 1877, he had complained of incontinence of urine, an oppressed feeling over the hepatic region, dropsy in the feet and face, and a gradual loss of flesh and strength. The two years preceding his death he had been unable to work, but was only confined to bed five days. During the latter period his symptoms were, in the order in which they were developed, great prostration, scanty secretion of urine, blindness for twenty-four hours preceding repeated convulsions, loss of speech, and almost total inability to swallow, although consciousness was preserved until coma ushered in the death scene. His temperature (axillary) did not rise above 100.5°. The surface head temperature nearly equaled that of the axilla. No paralysis of the muscles of the face or extremities preceded death. The liver during life did not appear to be enlarged or altered in its outline.

The post-mortem examination revealed in the brain engorgement of the veins, with some effusion, slight pia-mater inflammation in the neighborhood of the fissure of Rolando, apparent degenerative changes in the left island of Reil and anterior portion of the left temporo-sphenoidal lobe; in the pleura and lungs old and numerous pleuritic adhesions, lobular and vesicular emphysema of the lungs, congestion of both lower lobes, and a nodule (probably cancerous) of the left apex; in the heart, fatty degeneration, dilated right ventricle and incompetent mitral valves, from ossific change; in the liver, multiple cancer, without an increase in size or a nodular condition of the organ; in the spleen, marked increase of fibrous tissue and atrophy of the gland to one-half or less its normal size; in the kidneys and ureters, the last stages of pyo-

nephrosis, the glandular tissue being nearly all destroyed; the pelves were as large as a good sized orange, and the ureters dilated so as to admit a man's thumb; in the bladder, great hypertrophy of the mucous membrane and decrease of the capacity of the viscus.

Primary Carcinoma of Pancreas and Liver.

Presented by Dr. E. T. Bruen.

The interesting features pertaining to this case are the age of the patient, 24 years, and the rapidity of the abnormal processes. These rendered the diagnosis of malignant disease doubtful, until the appearance of nodular tumors in the liver. The family history was free from hereditary disease. The commencement of the disease dated from September, 1881; death occurred on the 15th of January, 1882. At first the symptoms related solely to the digestive tract, such as a dull, heavy sensation after eating, with acid eructations and occasional vomiting. Subsequently sharp, cramp-like pains in the abdomen were a prominent symptom. After the lapse of a week there commenced general itching, and two weeks later the skin became yellow. This yellowness and itching never disappeared during the history of the case. At the autopsy the gall-duct was obstructed by the enlarged head of the pancreas, so that extreme dilatation of the gall bladder had ensued. This was probably the cause of the jaundice, and not the liver disease itself. The bowels were regular and the appetite good when first seen. The case then presented evidences of partial obstruction of the gall-duct, with digestive disorder, but without the symptoms characteristic of malignant disease of the stomach or bowels. By the middle of December, 1881, the liver dullness extended from the fourth interspace to three inches below the ribs, in the nipple line, and from the ensiform cartilage the line of dullness extended to within one inch of the umbilicus. The hepatic region was tender on pressure, especially over the epigastrium. The patient complained, about this time, of dull pain over the liver, with griping pain in the abdomen. The pulse was 76 per minute. He had lost four pounds since admission, and looked thin. About this time a small inequality was noticed in the surface of the liver, three inches above and a little to the inner side of the umbilicus. The spleen was enlarged. By January 7th the bosselation of the liver became distinct, and the enlarged gall-bladder, rendered irregular by gall-stones, presented a slowly increasing, elastic, tender tumor, situated to the right of the epigastrium and umbilicus. By January 12th the pulse became rapid, 130 per minute, the patient rapidly failed; death occurred January 15th.

Autopsy.—The pancreas was enlarged to double its size, the growth chiefly occupying its head, and compressing the common bile duct. Microscopic examination showed it to be schirrous carcinoma. The liver was thickly studded with nodules of medullary carcinoma, explaining the ante mortem bosselated feel of the organ. The gall-bladder was distended to twice its normal size, and contained a number of gall stones.

Remarks.—The duodenal end of the organ, as is usual, was the seat of the disease. In a paper on thirty nine cases of primary carcinoma of the pancreas, in St. Bartholomew's Hospital Report for 1881, jaundice is stated to be always present, while in twenty-four cases of secondary carcinoma this symptom was noted in but seven severe cases. This is presumably from the secondary growth occurring in some other portion of the organ than its head. Murchison says that the characteristic symptoms of carcinoma of the pancreas are pain in the pancreatic region, sensible tumors and persistent jaundice. To these Dr. Bruen would add intestinal dyspepsia, which differs in some essential features from the dyspepsia of organic disease of the stomach.

Dr. Musser remarked that he could vouch for there being a distinct tumor of the pancreas, as he was present at the autopsy. The case had been under his observation in the dispensary one month prior to admission to the hospital. On account of the age, he was puzzled as to an exact diagnosis, although confident that the cause of the jaundice was obstruction. He noted, among other symptoms, the intense itching of the skin, a point of importance, Sims says, in the diagnosis of obstructive jaundice from that due to suppression. In five cases of tumor of the pancreas he had lately seen, all were accompanied by jaundice.

Dr. Bruen called attention to the uncertainty of bosselation as a symptom of malignant disease of the liver. He had presented to this Society, only two weeks since, a liver exemplifying this condition in a marked degree, where nothing beyond cirrhosis in the stage of enlargement existed. The occurrence of carcinoma of the liver at so early an age, is unusual, although Dr. Pepper had shown a specimen of the disease to this Society some years ago, occurring in an infant.

Dr. Tyson said that there were two points in this case of great interest to him; firstly, jaundice in carcinoma of the pancreas; while it is a frequent symptom, it is by no means an invariable symptom. Seven years ago he presented to this Society the specimens from a case of primary pancreatic carcinoma, where no jaundice had been present, and six months ago he presented to the Society a specimen of enlargement of the head of the pancreas from a patient who also presented no symptoms of jaundice. Secondly, as to the diagnosis from cancer of the stomach, he had noted in his experience, as was mentioned in the history of Dr. Bruen's case, the absence of gastric symptoms. This negative symptom is of importance since the tumor is often detected in precisely the same spot in both these diseases. The absence of gastric symptoms with intestinal indigestion, irrespective of fatty diarrhœa, he considered the most reliable diagnostic points between carcinoma of the pancreas and stomach.

Spindle-Celled Sarcoma of the Small Intestine.

Presented by Dr. W. A. Edwards.

On September 23d, 1882, I was asked to assist Dr. W. F. Atlee in the removal of an abdominal tumor. The patient, æt. 48 years, whose menstruation had ceased at 31 years, first noticed the swelling in April last; on the day of operation she measured thirty-eight inches around the abdomen. The usual incision was made and the

tumor reached, when its surface was seen to be of a dark purple hue, with a net work of large veins ramifying in every part of its serous covering. A trocar and canula were introduced, but nothing but blood followed the withdrawal of the trocar. The sac was then torn open and its contents, of a soft, brain like consistence, were emptied out. The growth was now turned out of the abdominal cavity. There was no distinct pedicle, but an attachment to the intestine, of about the size of a half-dollar, was seen. Dr. Atlee says, "when I emptied the sac of its soft contents, I examined carefully, with *extreme care*, the part fastened to the intestine, and my fingers passed into the intestinal tube." A silk cord was tied around the attached portion and the remainder of the growth removed. The omentum was attached to the growth for a space of two inches; this was ligated and cut away, and the abdominal wound was closed, etc.

Death occurred on Sept. 25th, at 4 A.M.

This growth sprang primarily from the submucous tissue of the small intestine, and grew with great rapidity, as the patient was only aware of its presence last April, and by September she measured, as above stated, 38 inches.

Microscopical examination of preparations taken from several portions of the growth clearly show it to be a spindle-celled sarcoma, and a most typical one at that. The small intestine is an unusual site for this neoplasm. As far as I am able to ascertain, there is no recorded instance of its occurrence in this situation. My friend, Dr. Formad, to whom I have shown the growth, concurs with me in this statement. On the day of operation I noted, as well as I could, the absence of all secondary deposits. The surrounding intestines and peritoneum were apparently normal, not even unduly hyperæmic. No post-mortem was permitted.

Chronic Parenchymatous Nephritis, Complicating Phthisis Pulmonalis.

Presented by Dr. Jas. Tyson.

My object in showing these kidneys is to illustrate the morbid anatomy of the renal complications which so frequently attends the later stages of phthisis pulmonalis. It is very well understood that when œdema of the feet and legs present themselves in cases of consumption, the end is not far distant, but the renal complication which is at the bottom of such œdema is often overlooked. It is, of course, not impossible that there should be œdema in the last stages of phthisis, from simple alteration in the composition of the blood, a watery state of it, but in the majority of instances it means that the kidneys have become involved. As to the form of disease affecting the kidneys it is acknowledged that it may be either lardaceous disease or chronic parenchymatous nephritis, but I think the impression prevails, it was at least my own until recently, that the amyloid kidney is the most frequent complication. I believe, however, that the chronic parenchymatous nephritis is more common, and it becomes a matter of interest, if not of importance, to be able to diagnose between these two conditions. It is well known that the microscopic and clinical characters of the urine in these two forms of kidney disease are often identical, so that no assistance is afforded by a study of the urine. The history of the case, of course, leads to neither particular form, but suggests both. One criterion only can I recall to aid us, and that is the presence of enlarged liver. So commonly associated is the enlarged amyloid liver with amyloid kidney, that the absence of it almost necessarily precludes the presence of amyloid kidney. At least, I am sure we would err less frequently if we were to consider all cases of renal disease attending consumption, unattended by enlarged liver, to be parenchymatous nephritis rather than lardaceous disease. It is true we often have enlarged fatty liver in consumption, but the degree of enlargement never reaches that of the amyloid liver, and hereafter I shall be inclined to consider all cases of renal disease complicating consumption to be parenchymatous nephritis, unless they are associated with enlarged liver, when I shall conclude that they are instances of amyloid disease.

Dr. Bruen considered that the passage of large quantities of urine and the history of specific disease or of prolonged suppuration preceding the kidney trouble, would warrant a diagnosis of amyloid renal disease.

Dr. Musser would ask whether the heart was hypertrophied and what was Dr. Tyson's experience regarding hypertrophy of that organ in cases of amyloid disease and of chronic tubal inflammation of the kidneys. If not too late he would like to call attention to the absence of cardiac hypertrophy with an infinite degree of obstruction in the renal circulation, in the case Dr. Eskridge had presented. This is in direct opposition to the view held by some that the hypertrophy of the heart is a sequence of the renal obstruction in chronic interstitial nephritis.

Dr. Tyson replied, that in this particular instance he did not see the heart and could not tell whether it was hypertrophied or not. The same law holds good for amyloid kidney as for chronic nephritis; if the case last long enough, hypertrophy is sure to be found sooner or later.

Ecchymoses of Mucous Membrane of the Stomach.

Presented by Dr. J. M. Barton.

The history of this case was that of chronic lung trouble. The stomach upon being opened presented an irregularly shaped extravasation of blood, about two thirds of an inch in diameter. The mucous membrane covering the effusion was healthy, as it was in the rest of its extent.

Dr. Tyson remarked that these effusions are not uncommon, but he had never seen them except in their pin-point form.

Dr. Roberts asked if there had been violent vomiting recently.

Dr. Barton replied that nothing of this sort had been observed for some months prior to death.

—A writer in the *Live-Stock Journal* says that sunflower oil is greatly used for adulterating salad oil. Its leaves are much used for adulterating tobacco. Its oil is unsurpassed as a lubricant, and soap made from it is unequaled for softening the skin.

Editorial Department.

Periscope.

Colic in Children.

The *Medical Times and Gazette* says: In a clinical lecture delivered by Hofrath Prof. Widerhofer, and reported in the *Allg. Wein. Med. Zeitung*, No. 22, we find the following observations:—

By the term colic we understand an intestinal neurosis originating in irritation of a chemical or mechanical kind, of the sensory nerves of the mucous membrane of the intestinal canal. The causes of this irritation arise either in a changed condition of the mucous membrane or in the nature of the contents of the canal. There may also occur purely nervous colic, wherein neither irritating ingesta nor a pathological state of the canal is present, excitement of the central organs being propagated to the nerves of the canal. In infants who are at the breast it is indigestible milk, and especially when this is too rich in fatty matters, that causes the colic; and when children during the first six months are fed with amylaceous food, before a sufficiency of saliva is secreted, colic is also produced. This occurs, too, when indigestible matters are swallowed, such as sand, small pebbles, etc.; and we have good opportunities of observing the operation of this cause in idiots, who often swallow such objects in great numbers. And here we have to meet the question, whether during the period of lactation the mental emotions of the nurse may not induce colic in the infant. It is beyond doubt that frequent mental emotions may induce colic with convulsions, which may be explained by the changes that are induced in the secretion of the milk. In the group of colics induced by irritation caused by the contents of the canal, must be included that caused by constipation, by worms, and by the presence of foreign bodies. Of the morbid conditions of the mucous membrane which give rise to colic, enteritis follicu losa may be especially mentioned. and then scrofulous and catarrhal ulcers, the worst forms being observed in intussusception. Pure nervous colic appears in diseases of the spinal cord, and it may appear in hysterical form, which is not so very rare, and also as intermittent colic, with as regular rhythm as in intermittent fever. We may also include metallic colic, which certainly occurs far more frequently in children than it is diagnosed, as might be expected from the frequency with which toys are made of or contain lead. As regards diagnosis, the purely windy colic produced by the collection of gases which distend the canal and irritate the sensory nerves, comes on with attacks of pain and with distention of the abdomen, ending with the expulsion of flatus. These attacks are paroxysmal, and are frequently accompanied by clonic convulsions, which may last for some minutes, and even for an hour or more. After the cessation of the paroxysm the child is either itself again, or may remain dull and feeble. In the intervals of the attacks there are no essential cerebral symptoms perceptible. The prognosis depends upon the nature of the cause, but it has been questioned whether a colic of itself alone may not prove fatal. Through the long duration of the accompanying convulsions, through the shock and the exhaustion of the nervous system, death may follow, and at the post-mortem no anatomical cause of the fatal termination can be shown. Hysterical attacks of colic especially concern very excitable children, usually nervous girls, and are characterized by violent pains, a drawn-in abdomen, slight convulsions, and obstinate constipation. In the treatment of colic we must first endeavor to remove the cause. In suckling infants, colic is especially apt to occur when the nurse's milk exhibits a large proportion of fat, and in such a case the nurse should be changed. In flatulent colic, oleum chamomillæ or fœniculi may be given, with a drop of tincture of opium, as an oleo-saccharate. In metallic and in hysterical colic, belladonna is the best means; and intermittent colic should be treated by quinine.

Cardiac Affections in Connection with Neuralgia of the Left Arm.

The recent session of the French Association for the Advancement of Science terminated with a communication on this subject, by M. Potain, the following abstract of which is from the *Med. Press and Circular*:—

It is well known that irritation of the digestive organs can produce, by reflex action, dilatation of the right side of the heart, or even of the left ventricle, and, in consequence, peripheric neuralgia. This will be shown in the following cases: 1. A soldier was wounded in the left arm and the limb was amputated. The healing of the stump caused a tension of the nerves, and the young man, long after his recovery, became subject to palpitations, suffocations and hypertrophy of the heart. Injuries of this nature are often followed by hypochondria. 2. Another young man had his forearm crushed, and this resulted in a comminuted fracture, with painful cicatrices. After great fatigue he became subject to palpitations and oppression, so that it was necessary to give up all violent exertion. He had all the symptoms of hypertrophy of the heart, and was also hypochondriacal. 3. A soldier had the left armpit pierced by a ball, and it produced a reaction when healing which prevented his extending his arm and necessitated forced movements, which caused great pain. The patient suffered from palpitations and oppression, and some time after M. Potain discovered that there was a considerable hypertrophy of the heart. Here are three cases of patients who, although with a perfectly healthy heart before the wound was received, suffered afterwards from palpitations and hypertrophy. Here digitalis was indicated. These symptoms differ from those in which the hypertrophy, being situated on the right side, is caused by irritation of the digestive organs. In such cases digitalis is of no use, but one must have recourse

cardiac affections, and that spontaneous neuralgia is also capable of acting in the same manner.

A New Material for Casts and Models.

In the *British Medical Journal* Dr. Anthony Bowlby thus describes his process. The articles used are Swinburne's prepared gelatine, 8 oz.; French chalk 14 oz.; honey, 26 fl. oz.; glycerine, 6 fl. oz.; that is, the proportion of 1 part gelatine, $1\frac{3}{4}$ French chalk, $3\frac{1}{4}$ honey, $\frac{3}{4}$ glycerine. Prepare a coloring solution: rub down half a drachm of carmine in half an ounce of water; to this add two and a half ounces of glycerine, and keep in a stoppered bottle; shake the mixture before use.

The French chalk should be perfectly white, and the honey of as light a color as possible ("Furber's Strained Californian Honey" and "Narbonne Honey" are the best). The cost of these materials will be about 7s.

The implements required are two large china pudding dishes, and two saucepans large enough to contain the same. Put all the gelatine into one of the dishes, and add plenty of cold water. Leave it to soak exactly half an hour. While the gelatine is soaking, weigh out the French chalk into the other dish, and add the glycerine. Stand the pots containing the honey in some hot water till it is fluid enough to pour; then add it to the mixture of chalk and glycerine. Mix all well together, and place the dish containing the mixture in a saucepan of boiling water: let it get nearly to boiling heat, and keep on stirring it gently.

To this mixture must now be added the coloring solution, sixty minims of which will make a

Sanitary Houses and How to Select One. By F. A. Bond, M.B. Edin. Univ. London: Kegan, Paul, French & Co. 1882. pp. 60. Price one shilling.

The great want of interest displayed by the average American citizen in matters pertaining to the science of hygiene is truly disheartening. It is not so much their fault as their misfortune, since they have not been taught to appreciate its beneficent value. That they must be so instructed is a foregone conclusion, since hygiene is the most progressive of all sciences. This little work before us we can commend as a safe guide to put into the hands of the average man or woman looking for a home. It is short, concise, and contains much excellent advice.

How To Make the Best of Life. By J. Mortimer Granville, M.D. Boston: S. E. Cassino, 1882. fol. 96. Price 50 cents.

Dr. Granville has written several small popular works on the preservation of health, and if they are all as meritorious as the little one before us, we can recommend them as worth the price asked. The subjects treated of in this book are, "Health," "Feelings," "Breathing," "Drinking," "Eating," "Over-work," "Change," etc. While, from the size of the book, all these subjects are necessarily but cursorily discussed, yet the average intelligent man will find some very useful hints to aid him in the warding off of disease.

THE

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D. G. BRINTON, M.D.,
JOSEPH F. EDWARDS, M.D., } EDITORS.

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THE HIGHER EDUCATION OF WOMEN.

There is a professional, as well as a popular, aspect of this question, which is at present agitating our community; there is a physical, as well as a moral, question to be considered in deciding this problem. In a general way, it must be said that women have just as much right to receive a scientific education as have men; we are all human beings, made upon the same fundamental plan, and it would seem unjust to deny to any one sex, as a sex, that education which is the lever that lifts the human animal above the brute creation.

But, will it be really to the ultimate benefit of women to receive this higher education? To those who are physically and mentally capable of receiving it, we must answer in the affirmative. That there are so few women to be found in the sphere of public intellectual life, does not, we think, argue their natural unfitness for such positions, but is rather the direct result of the denial of opportunities to acquire the necessary qualifications to properly fill such positions.

No matter what opportunities may be offered to women, the proportion which they will hold to men in the scientific world will ever be very

CHOLERA.

Fore-warned is fore-armed. It may not come, but no one can say so, absolutely, and it is always well to be prepared for danger.

Cholera is now very prevalent in the Eastern Archipelago. In 1832 and in 1847 this dreaded

eighteen training schools for nurses in the United States, the two oldest of which exist in Philadelphia, viz.: The Philadelphia Lying-in Charity and Nurse School, founded in 1836, and the Nurse's Training School of the Woman's Hospital, founded in 1863

The importance of professional nurses cannot be overrated and, we fear, is but very imperfectly appreciated.

The average physician comes into contact with them only when he meets a monthly nurse in a case of midwifery, when, partly through early prejudice, and partly on account of the fact that the majority of these women are absolutely destitute of all that goes to make a good nurse, he conceives a violent dislike to the whole class.

While this feeling is natural, it is unfortunate, because, were things as they should be, it would be unnecessary.

Some of these monthly nurses are really very good, worthy and efficient persons, and it is to make *all* such, that training schools are designed.

Every physician realizes and admits the great advantages to be derived from capable nursing; indeed, we look upon it as the greatest accessory to our art, even, in many cases, as an indispensable necessity for the successful termination of sickness.

But where to procure this trained assistance, is the problem that has long bothered many physicians.

To supply this want, training schools exist, and that they may be successful in their missions, they must receive the hearty and active coöperation and support of the profession.

Notes and Comments.

An Easy Method to Discover the Tubercle Bacilli in Sputa.

Prof. Baumgarten has just published in the *Ctbl. f. d. Med. Wiss.*, 25, 1882, the following easy method to detect in the expectorated matter of phthisical persons the pathogenic tubercle bacilli.

Phthisical sputa are dried and made moist with very much diluted potash lye (1 to 2 drops

of a 33 per cent. potash lye in a watch glass of distilled water). The tubercle bacilli are then easily recognized with a magnifying power of 400 to 500. By light pressure upon the cover-glass the bacilli are easily pressed out of the masses of detritus and secretion. To prevent, however, the possibility of mistaking the tubercle bacilli for other septic bacteria, or vice versa, the following procedure is necessary: after the examination just mentioned, the cover glass is lifted up and the little fluid sticking to its under side allowed to dry, which is done within one or two minutes. Now the cover-glass is drawn two or three times rapidly through a gas flame; one drop of a diluted (but not too light) common watery anilin solution (splendid for this purpose is the watery extract of a common anilin ink-paper) is placed upon the glass. When now brought under the microscope all the septic bacteria appear colored intensely blue, while the tubercle bacilli are absolutely colorless, and can be seen as clearly as in the pure potash lye. We may add, however, that Klebs considers his own method preferable.

As the whole procedure does not take longer than ten minutes, it is to be recommended in general practice. The consequences of Koch's important discovery become daily more apparent, and their application more practicable.

Sloughing of Bowel—Spontaneous Recovery.

Dr. T. Sumter Means reported a case that well illustrates the reparative power of nature, at the last meeting of the South Carolina Med. Ass. (*Transactions*). The patient was crushed between cars, receiving a contusion of the abdomen, which, when seen (eleven days later), was much distended and discolored. About the junction of the ilium and cæcum there was a small opening in the abdominal wall, through which the nurse thought she had noticed an escape of bubbles of gas. On removing the plug from this opening there was a discharge of about a teacupful of fecal matter. His bowels had been freely moved several times by a mercurial cathartic. Carbolic acid dressing, with light poultices and McMunn's elixir, to control peristalsis, constituted the treatment. The knees were kept drawn up, to relax abdominal muscles, beef essence and milk punch, but no solid food was allowed. For a few days the rent grew larger, until it was one inch in diameter, and the fecal matter continued to be discharged for twelve days, when a scab formed that closed it. After about three weeks his bowels were opened by enema, and he continued to improve until, in three months from receipt of injury, he was completely recovered.

Brain Syphilis.

Dr. Brandies presented recently to the New York Society of German Physicians (New York *Med. Jour.*), a young man who had contracted a chancre six years previously. He presented undoubted evidences of having had secondary syphilis. About six months since he had an epileptic seizure, and subsequently two more such attacks. The patient complains of deafness and vertigo. On examination both ears were found affected with otitis media. In walking, a lack of co-ordination of movements was noticeable. Great improvement has taken place under the use of iodide of potassium. The hearing became much better, and the patient could walk for some distance with closed eyes. Dr. Jacoby believed this to be a case of brain syphilis, and he was inclined to locate the lesion in the rhomboid fossa, near the exit of the acoustic nerve.

The Respirator in Syphilis.

Dr. W. S. Oliver thus writes in the *Lancet*:—

The treatment of syphilitic ulcers of the tongue, mouth, and fauces by respiration of iodine and carbolic acid, etc., has proved so successful in numerous instances which have come under my notice of late, that I am desirous of giving it publicity in your columns. For the past two years this form of syphilis has been peculiarly prevalent in this command, and, as usual, proved so tedious of cure, and so liable to recur under the ordinary treatment, constitutional and local, generally adopted, that I decided this year to test the efficacy of the "respirator," and I was gratified to find that the results, in all instances, were most satisfactory. The period of trial is as yet too brief to furnish reliable evidence of the constitutional and permanent effects of this treatment; but certain it is that locally its action is most prompt and palpable, all ulcers assuming a healthy appearance generally in forty-eight hours, and wholly disappearing in ten or twelve days. Immediate relief is also afforded from any panic or discomfort previously caused by the disease. After free purgation the only treatment needed is the use of the "respirator" for four hours daily, two morning and evening, after breakfast and tea. The solution I generally use is Coghill's combination of iodine, carbolic acid, and creasote, and I prefer oakum as the mate

rial for its retention. The form of "respirator" I have adopted is one I have devised myself, and is furnished with a detachable perforated diaphragm, which admits of its being thoroughly cleansed and purified for use in different cases.

Pathology of Sympathetic Inflammation.

By the anatomical examination of a series of eyes, when the morbid condition of one caused a sympathetic affection of the corresponding organ. Dr. W. C. Ayer's (*Arch. f. Augenhlkd.*, xi, 3) comes to the following conclusions:—There are two ways by which the sympathetic processes may be transferred, one is the optic neuritis, the other the cyclitis, or both act at the same time. Those eyes which induce the sympathetic lesion within the first 15 to 20 days, transfer first the pathological condition to the optic nerve of the eye sympathetically diseased; in the other cases, where the ciliary nerves establish the transfer, the sympathetic affection usually appears later. In nearly all such cases A. was able to demonstrate the transfer of the morbid lesion by the ciliary nerves. In the eye first diseased, always a pathological change of these nerves were found under such circumstances.

The Abortive Treatment of Gonorrhœa.

Dr. Beresford Ryley, writes to the *Lancet* on this subject. He reasons first, that two diseased surfaces in constant and close apposition with each other are unfavorably placed for recovery, therefore he separates the walls of the inflamed urethra by injections of hot water retained for twenty minutes or longer, which he accomplishes by the aid of a simple spring forceps to hold the extremity of the penis. Secondly, the gonorrhœal discharge must perpetuate and increase the inflammatory stage, therefore the injections when frequently used will have a salutary effect in this direction. Thirdly, it being well known that hot fomentations and applications are soothing and emollient in all inflammatory conditions, it follows that these hot injections and hot baths and the application of flannels wrung out of hot water must be beneficial.

And, lastly, certain drugs that have a styptic effect upon the genito-urinary mucous tract are plainly indicated. But experience proves that they can only be administered with benefit after the more acute symptoms have subsided. I therefore give the liq. copaivæ comp. when that stage has been reached, which is generally the case within a few days under the treatment indicated, and at the same time add three drops of liq. plumbi to each ounce of the injection, which must now be made with distilled water, and used less warm, or altogether cold. In some cases weak injections of nitrate of silver or chloride of zinc may now be of great use. I need scarcely add that the regimen, alimentary and medicinal, must be strictly non-inflammatory in the acute stage. Will you permit me to say, in conclusion, that I think the *modus operandi* of Mr. Cheyne's treatment and mine is very much the same—viz., separation of the walls of the urethra, dilution of the discharge, and lubrication of the inflamed surfaces with the cocoa-butter bougies. His objection to injections, that their effects "are only momentary," cannot apply to the manner in which I recommend them.

Subnitrate of Bismuth for Cancrum Oris.

Dr. C. J. McGuire, of New York (*Medical Gazette*), claims specific action for the local application of subnitrate of bismuth for cancrum oris.

Nineteen children were attacked with the disease. Dissatisfied with the results of his treatment in the four first cases, he determined to try the effects of subnitrate of bismuth applied externally to the affected parts. The result was the immediate improvement in the appearance of the ulcers, and eventually a complete cure. From the first appearance of the disease in the institution up to the present time 24 cases were treated, including the 4 that proved fatal; out of 20 cases treated with subnitrate of bismuth only 1 resulted fatally.

Special Reports.

NO. X.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.,

(*Continued from p.* 475.)

Michel Jul. *Affections of the Eye from Disturbed Circulation in the Carotid.* (*Beiträge zur Ophthalmologie. Festgabe zur Feir des 25—jährigen Jubilaums von Horner Weisbaden*, 1881.) If a carotid artery be compressed in a man, a paling of the papilla of the corresponding side, a fainter column of blood in the arterial vessels, and a diminution in width of the venous retinal vessels, may be observed for a short time. The stage passes quickly, and great venous stasis and absence of venous pulsation show themselves. A similar venous stasis of the retina is visible when one arm is stretched upward. Ligation of one carotid is followed, immediately

after the operation, by complete arterial and venous anæmia; later, by filling of the collateral channels; but a venous hyperæmia persists, on account of the diminution of arterial pressure.

The alteration is observed in the eye corresponding to the ligated carotid. In the venous system of the side opposite to the ligated vessel, a stronger rhythmical pulsation can be seen. Atheroma of the carotid is in intimate relation with opacities of the lens; the so-called senile cataract, as well as unilateral cataract with unknown cause. finds in this a satisfactory explanation. (*Arch. f. Ophthal.*, Vol. xi, No. i.)

Noyes. *Cure of Cataract by Electricity.* (*Amer. Ophth. Soc.*, at Newport, 1881, July 27th, 28th.) A seeming cure of cataract by electricity proved to be a case of choroiditis, in which, under electrical treatment, flakes in the vitreous had disappeared. (*loc. cit.*)

Sorokin. *Parasitic Growths in the Eye. Der Arzt.* No. 16. The forms observed by Förster and Gräfe do not belong to leptothrix. In the cornea of an eye which had perished from panophthalmitis, he observed long, thin, opaque filaments; they are thicker than those of leptothrix buccalis, and show a tendency to twist themselves lengthwise around each other, or to assume a curved form. Attempts at cultivation failed, excepting in human blood; here the filaments lengthened, gathered themselves together in a curved form, showed transverse marks of segmentation, and divided into two to five pieces of different length; the process lasted from twenty-five minutes to one hour. The new pieces congregated, and thus formed additional bundles. This is a new form, *leptothrix oculorum* Sorokini. In an eye effected with panophthalmitis after iridectomy, and also in an existing catarrh of the lachrymal passages, he found filaments dividing dichotomically, having a thickness of 2 or 3 division marks of the micrometer; they also exhibited transverse division, and thus formed widened rings. The twigs branch off only where there are transverse divisions. Besides these, there were folds of cells of various size and shape. All attempts at cultivation failed. (*loc. cit.*)

Wolfe, J. R. *On Artificial Pupil. Medical Times and Gazette*, June 1, 1881, p. 611. In a lecture delivered at Anderson College, W. gives the indications for the operation, and among the contra indications, says that in occclusion from specific iritis no operation should be attempted till twelve months after all disappearance of irritation in the eye.

During the twelve months' interval the patient must be kept on iodide of potassium and mercury. He described the operation and points of selection. He deprecates the employment of iridotomy. (*loc. cit. Fitzgerald.*)

Theobald. Remarks upon the use of *Duboisia in Ophthalmic Practice*, with report of a case in which *alarming constitutional symptoms* followed its application to the eyes. *Maryland Med. Jour.*, vol. viii. T. thinks the toxic action of the drug more likely to manifest itself in an uninflamed eye than in one that is inflamed. Its unpleasant effects are manifest within an hour after it is applied to the eye. (*loc cit. Swan M. Burnett.*)

Haab. *Anatomical Examination of an Ophthalmus, at the age of* 27. Ophthalmological contributions on the occasion of the Jubilee of Horner. Weisbaden, 1881. The ocular muscles normally developed; the globes appeared as small nodules the size of a bird-shot; the optic nerves were delicate, thin threads, the orbits of normal size. Sclerotic, choroid, pigment epithelium, retinal elements, and vitreous could be demonstrated in the eye, but no conjunctiva, cornea, iris, ciliary body and lens. The optic nerve consisted only of connective tissue. The optic tracts could be followed as white strings up to the corpus geniculatum internum. The corpus geniculatum externum was absent, the pulvinar thalami optici distinctly smaller. The thalamus and corpora quadrigemina could not be distinctly traced. (*loc. cit.*)

Hirchberg. *Coloboma and Microphthalmus. C. f. A.*, September. Congenital microphthalmus is in some cases combined with amaurosis, opacity of the lens, diminished tension, cyclitis and coloboma of the iris. Hirchberg has observed four cases of this kind. (*loc. cit.*)

Leydig. *The Eye-like Organs of Fishes.* Bonn, 1881. Certain spots upon the ventral surface of some sea-fishes, which by Leuckart had been explained as secondary eyes, are not taken as organs of special sense by Leydig, who supposes that they are allied to the spendo-electrical or electrical organs of other fishes. (*loc. cit.*)

Michel. *Iris and Iritis.* G. *Arch. f. Ophth.*, vol. xxvii, 2. I. Histology. The proper substance of the human iris is enclosed between two membranes; the anterior limiting membrane is a delicate layer of endothelial cells; the posterior one consists of peculiar cellular elements; upon its posterior surface is a pigment layer of nearly round, irregularly arranged, pigmented cells. Behind the endothelial membrane is a layer of anastomosing cells, interspersed with

lymphoid cells, and resembling the reticulated structure of the lymphatic glands; for this reason Michel calls it the reticulated layer. Behind this layer, and partly projecting into it, is a radiating trabecular arrangement of connective tissue fibres; these trabecles support the numerous blood vessels and nerves; they are covered with flat cells, and the spaces between the trabecles and between these and the posterior limited membrane, are filled with a reticulum of cells, arranged in a similar manner as in the reticulated layer. For this layer Michel proposes the name "vascular layer." From in front. backward, the iris consists, therefore, of the following layers: 1, anterior limitans (endothelial membrane); 2, reticulated layer; 3, vascular layer; 4, posterior limitans; 5, pigment layer. From its histological elements, the iris would appear to be a modified glandular structure. The system of lucunæ are lymphatic cavities in which the nutritive material, filtered from the blood vessels, is collected; the anterior chamber is a large lymph cavity. II. Development. 1. In the human embryo, the development of the sphincter portion takes place very early; that of the ciliary portion at the end of the sixth month. 2. The pupillary membrane is a pellicle which contains nuclei, epithelial cells and blood vessels; the latter two disappear, and the pupillary membrane becomes the endothelial layer upon the anterior surface of the iris. 3. At a certain period of fœtal life there is a fold in the ciliary portion, the plica iridis. If the two opposite surfaces of the pupillary membrane are not separated, the so-called membrane pupillaris perseverans will be formed. 4. At a certain period of fœtal life the posterior portion of the iris shows three layers: the pars ciliaris retinæ, the pigment layer, the limiting membrane. The pars ciliaris retinæ becomes pigmented and disappears. 5. The pigment layer and limiting membrane send projections into the sphincter portion; the largest and most strongly pigmented projection is at its peripheric portion, the so-called pigment spur. 6. During embryonic life smooth muscular fibres cannot be demonstrated in any part of the posterior limiting membrane. 7 During the last months of embryonic life, and in the new-born, the posterior portions consist of only two layers, the pigment layer and the limiting membrane. 8. The limiting membrane must be taken as a continuation of the primitive limitans retina. 9. The projections from the posterior limiting membrane into the sphincter are the connective tissue septa, which separate the bundles of the muscle. The pig nentation of the so-called stroma of the iris is of post-fœtal development. (*loc cit.*)

Ogneff. *Histiogenesis of the Retina. Centralblatt, f. d. Med. Wissenschr.*, No. 35 1. In the earliest stages (rabbit's embryo) the retina consists throughout of spindle-shaped cells with oval nuclei and a narrow zone of protoplasm. From both ends of the cells, which lie on a different level, both inward and outward, are processes which are vertical to the outer surface of the retina, and which pass through its entire thickness. Here and there upon the outer surface of the retina are large transparent elements with limiting membranes which are not found at this stage. 2. The next changes are that the innermost cells become divided, larger and rounder. Their nucleus becomes more distinct, and they send off several processes which again form multiple ramifications. The processes, which run inward, and of which each cell sends off one only, turn and take a course parallel to the inner surface of the retina. They are the first indication of the layer of nerve fibres. The outermost layer of cells is distinguished by thick, at their inner end, and foot-like projections; these elements are the embryonic Müller's radical fibres. The formation of the nerve cells and of Müller's fibres is therefore one of the first embryonic changes in the retina. 3. Then between the nerve fibres and the spindle-cells above them there appears a small stripe, the first indication of the molecular layer. At this period the layer consists of numerous processes of the nerve cells, of the straight columns of Müller's fibres and of processes of the spindle-cells and numerous very small granules. 4. The layers become more and more developed; especially the molecular and nerve cell layers become more sharply defined and thicker. Free nuclei and roundish cells appear in the molecular layer. The differentiation of the retinal layers becomes completed by the formation of the rods, and of the two layers and granules. The rods are processes of the outermost layer of cells, which grow beyond the outer limiting membrane. The retina of the mammalia shows the same process of development as that of the birds and batrachia. (*loc. cit.*)

Wälchli. *Microscopical Examination of the Colored Globules in the Retina of Birds. G. A. f. Ophth.*, vol. xvii, 2. There are three kinds of coloring matter in the globules, sphærorhodin, sphæroxanthin and sphærochlorin. (*l. c.*)

Wall. *Congenital Absence of the Eyeballs.* N. Y. *Med. Rec.*, March 26, 1881. The appendages of the eyes and the lachrymal glands were present. (*l. c.*)

Wetschtamon. *An Anomalous Structure of the Human Eye. Aerztliche Zeitung*, Nov. 1881, No. 36. Absence of both irides. Both eyes turned in and up. (*l. c.*)

Wiethe. *A Case of Congenital Deformity of the Papilla. Arch. Ophthal.*, vol. xi, No. 1. The papilla showed two dark elliptical depressions. (*H. Magnus, l. c.*)

Deutschmann. *On the Physiological Chemistry of the Fluids of the Eye. Arch. f. Ophth.*, vol. xxvii, 2. In the fresh aqueous humor there is 0.03 of albumen. In the vitreous there is much more than in the aqueous. It increases in both after death, more rapidly in the aqueous. (*l. c.*)

Pflüger. "Internat. Ophth. Congr. in Milan," p. 197. Atropine reduces the intra ocular tension. Eserine increases it, also the continuous current. Experiments to be continued. (*loc. cit.*)

Butz. Preliminary communication on the examination of *Physiological Functions of the Periphery of the Retina. Arch. f. Anat. und Phys*, Phys. Department, 1881, vol. 5. The sensibility to light of every wave length increases from the centre toward the periphery up to 30°, then decreases more or less rapidly, according to the kind of light. The increase in the sensibility to all kinds of light varies; in the most peripheric part of the retina it is highest for violet and lowest for red.

Goltz. *The Functions of the Cerebrum. Gesam. Abhand.* Bonn, 1881. The supposition of circumscribed centres in the cerebral cortex, with special functions, is untenable, consequently there is no part of the cerebrum which is distinctly set apart for vision. The visual disturbances which occur after traumata to one side of the cerebrum are symptoms of a general dullness in all the senses, and are caused by a general intellectual dullness. Goltz proposes the term cerebral diminution of sight, or cerebral amblyopia. (*l. c.*)

Landolt. *The Functions of the Retina. Arch. d'Ophth.*, vol. 1, 3. The retina has three functions, the perception of light, color and form. That of light is distributed over almost the whole retina equally, only in a small part around the fovea centralis it is somewhat greater. Perimetrically it extends outward 100°, inward 60°. The color perception decreases rapidly toward the periphery, but by higher intensities of light, colors are recognized to the limit of the field of vision. Perception of form decreases rapidly toward the periphery, so that at 50° from the point of fixation they are no longer recognized. The cause is want of practice. (*l. c.*)

Parent. *Optometry, Ophthalmoscopy and the Inverted Image. Rec. d'Ophth.*, 1881, Sept. Refraction can be determined in the inverted image in two ways. (1) By gradually moving the object lens to or from the eye, and noticing the change in the size of the image. In emmetropia it remains the same, whether the lens is held nearer to or further from the eye. In hyperopia the size of the image decreases when the object lens is removed from the eye examined. In myopia it increases under the same conditions. (2) By observing the parallactic displacement in comparison to a certain amount of upward motion of object lens. If we move the lens in the vertical plane, the image changes as follows: in emmetropia to an equal extent, in myopia to a lesser extent, in hyperopia to a greater extent. If we place certain glasses before the eye examined, and make these experiments, we can almost tell the amount of the anomaly of refraction by trying until the motions correspond to what they should be in emmetropia.

Schön. *Venous Pulsation in the Retina. Klin. Monasbl. f. Augenheilk.*, p. 345. 1. Venous pulsation is a phenomenon of impediment. 2. The exit of the usual quantity of venous blood is diminished by depression. 3. The pulsation is brought about by arterial pulsation. 4. The region in which this happens must include the optic nerve up to the lamina cribrosa. (*l. c.*)

Bjernum. *Hemianopia for Colors. Dansk. Hosp. Tidende*, January 18, 1881. Total color-blindness in the left half of the field. The margin passed precisely through point of fixation, in a vertical direction. There was an acute brain trouble; at least, the patient complained of a severe headache, and died suddenly. He was 39 years old. Unfortunately there was no post-mortem. Bjernum cites this case in upholding a theory of the existence of a color centre. (Samelsohn reported a similar case in November of last year.) (*l. c.*)

Brailey. *Report* of the Committee of the Ophthalmological Society *on Color-blindness.* Trans. Ophth. Soc., vol. 1, p. 191. *British Medical Journal*, April 23, 1881. *C. f. A.*, Sept., p. 289. There were 18,088 patients examined, 16,431 men, and 1657 women—with Holmgren's test. Of the men, 949 were Jews, showing 4.9 per cent., and 491 Quakers, showing 5 9 per cent.; 145 deaf mutes with 13.7 per cent. of color blindness. Of the remaining 14,846 men (of all conditions) there were 3.5 per cent. color blind.

Among the women there were 730 Jewesses

with 3.1 per cent., 122 deaf mutes with 2.4 per cent., and 216 Quakers with 5.5 per cent. Among the remaining 489 women, 0.4 per cent. were color blind. The unusual number among women is explained by the fact that Brailey says that in them it was not very pronounced. It was first doubted in the reference in the *Centralblatt* and absolutely contradicted by Cohn, of Breslau, that such a difference is found between the higher and lower classes, as Brailey says that in the lower class he found 3.7 per cent., and in the higher only 2.5 per cent. All who could not distinguish the paler shades were classed as slightly color blind; those who confounded red and green as pronounced. There were 615 of the latter class, and three cases of total color blindness. It was very seldom that blue and violet were mistaken for one another. Those who compared pink with deep blue, or violet and scarlet with dark green, were considered red-blind. Those who compared pink with gray or green, and scarlet with light green or light brown, were considered green-blind. The red-blind had no perception of light coming from the distance through a red glass, while those who were green blind distinguished it perfectly. Red blindness appears to be somewhat more frequent than green blindness in England. The intelligence of the person had no connection with the color perception. It was hereditary. (*l. c.*)

Donders. *Color Blindness. An. d'Oc.*, Sept., 1881. *A. f. Ophth.*, Vol. xxvii. 1. The first part is principally historical. He argues against Hering's theory, and also for the separate condition of a red and a green blindness. There are four primary colors, red, yellow, green, blue, and 6000 color impressions.

Dor. *Perception of Colors.* "Intern. Med. Congr.," in London. *Arch. Ophthal.*, x, p. 339. The perception of colors takes place in the brain or optic nerve, but not in the retina.

Dor. *Concerning Our Knowledge of Daltonism.* "Intern. Ophth. Congr.," in Milan, p. 179. Discusses the priority of Holmgren's method. As early as 1859 he used a similar method, employing the same test colors. Since he did not publish it, Holmgren could not have known it. He rejects the classification into red, green, and violet blindness, and admits five kinds: total color blindness, red-green blindness, with normal or shortened spectrum; blue-yellow blindness, with normal or shortened spectrum. Holmgren's method is not a certain one. Rejects the Young-Helmholtz's theory. Delbœuf's cure for color blindness is in reality no cure. (*l. c.*)

De Fontenay. Om Faveansquesler. Hospitals Tidende, July 28, 1881. Recommends a systematic education of the color sense in school, and in his Kontrol Med. Faveblindheden. Hospitals Tinende, Sept. 14, 1881. He examined 2737 men, finding 3 per cent., and 502 women, with 0.6 per cent. of color blindness, in railroad employees. (See another paper by the same author, based on the examination of 9659 persons. *Archives Ophthal.*, Vol. x, p. 8, etc.)

Jâger. *Method of Educating and Developing the Color Sense. Natur*, No. 47. Recommends the system of Magnus. (*l. c.*)

Jeffries. *On Some Points in Regard to Color Blindness, Journ. of Nervous and Mental Disease*, July, 1881. Contests the assertion of Bannister, that color blindness can have no practical bearing in railroading, it being a well-known fact that color-blind people can perfectly distinguish colored signals. (*l. c.*)

Macé et Nicati. Contribution to the Study of the Visual Field, for Color. *A. d'Ophth.*, vol. 1, p. 506. A red, a green, and a blue glass is held successively before the eyes, and is determined how for a while a white piece of paper can be distinguished on the perimeter. The field for red is most contracted on gradually diminishing the intensity of light. Atrophy of the optic nerve and glaucoma show the narrowest field for red, by good illumination; and also the most pronounced reduction of central vision, when a red glass is held in front of the eye. In alcoholic amblyopia the central scotoma for red the most pronounced.

Pierd Hony. Une visite aliénée de la province à Mombello. Internat. Ophth. Congr. in Milan, p. 162. In Italy Daltonism is not so frequent as in Northern Europe. This is due to climatic and geographical influences, and also to the great vocabulary of words denoting colors. Among 900 insane persons there was not one case of Daltonism. Violet was the color, distinguished with most difficulty. A majority of those suffering from melancholia shrank from bright colors. (*loc. cit. W. C. Ayer's Transl.*) T.

Correspondence.

A Tedious Case of Labor.

Ed. Med. and Surg. Reporter:—

At 10 o'clock, P.M., Nov. 8th, I was called to attend Mrs. B , who was about to give birth to her fourth child. She is naturally a very large woman, and exceedingly fleshy, weighing about 300 pounds. I found her in considerable pain. The waters had escaped before my arrival. Upon making an examination I was thunderstruck to find how little work nature had done

to prepare this woman for labor. The vagina was small, its walls tense and hard, and the ordinary dilatation and relaxation of the parts *non est*. With much effort I made out to reach the os, and found it hard and but little dilated. Her pains were short and seldom. I made preparations to wait and see what the *vis naturæ* would do. From time to time I examined her during a pain, and at 1 o'clock, A.M, found the os dilated to about an inch and a half in diameter, through which I made out the presentation; head. The pains were now very severe and quite frequent, but of short duration.

I now sent for an old and experienced physician, Dr. Patton, of Skowhegan, who arrived at 4 A.M. He at once appreciated the gravity of the case, but said that he would like to wait awhile to see what progress was being made, before he adopted radical measures. We gave ether in sufficient quantities to make it easy for the patient. But time wore away and our patient was wearing out with pain and worry. The head had descended, face anterior, and was wedged up high behind the pubic bones. At my request Dr. Patton resorted to his forceps. He worked away for half an hour in an attempt to apply them. He could get them nearly placed when the head would slip away and we would have to wait for another pain to bring it back. Once or twice he made some traction, without having been able to lock the forceps, but to no purpose. The pains were feeble now and the woman moaning piteously, and the attendants and husband alarmed. I asked the Doctor to allow me to try the forceps, which he did. I gave his up and got my own, feeling that, being familiar with them I could apply them. Alas, it was not as easy as it appeared to be. But with hook and vectis I brought the head down where we could work better.

I now gave up the case to the Doctor and asked him to go ahead and I would assist, but did not wish to take the lead. After many attempts to deliver by the forceps, at 10 o'clock A.M., the Doctor called for my perforator and went to work with that. But the large skull seemed perfectly solid and no fontanelle could be found. Everything seemed wrong and now doctors, as well as the patient, were becoming exhausted. After an hour's work, after much boring, drilling, and turning, the thick skull parted and the instrument went into the cranial cavity. In a short time more we had the child. The cord broke off high up, and as I had the smallest hand I introduced my right hand into the uterus and delivered the after-birth. It was now nearly noon. The loss of blood was considerable, but not great. The child was a female and of large size and big head. There was one small fontanelle, but so small that it could not be detected only upon very close examination. I don't know how much the child weighed, as we could find no steelyards to weigh it and was not allowed to remove it from the house. I should think it safe to say 10 pounds. The head was very large, and the skull very thick, and the bones as well united as in a child a year old. I should never have got through with the case had it not been for the valuable aid rendered by Hon. S. A. Patten, M.D.

The woman, at this writing (Nov. 14th) is doing very well. Of course she is very sore and lame and on account of being so fleshy and heavy is hard to take care of and move. A few Dover's powders to insure rest, a mixture to guard against a rise of temperature and inflammation, and carbolic vaginal injections constitute all of the treatment up to the present time.

A. E. FARNHAM, M.D.

East Madison, Me., Nov. 14th, 1882.

NEWS AND MISCELLANY.

The Great Characteristic of Modern Medicine.

In the course of the Introductory Address at St. Thomas' Hospital, Mr. J. Seymour Sharkey said: "And now, gentlemen, if I were asked what is the great characteristic of modern medicine, I should say that it consisted in the union of anatomy, physiology, chemistry, physics, and pathology to form the compound science of medicine, and in the clear appreciation of their necessary inter-independence.

"There was a time, and that no so long ago, when most of these subjects were thought to have but little to do with the actual practice of our art; when physiology and pathology were talked of rather as subjects to be mastered by a few learned professors, to be more or less familiar to a certain number of leading practitioners, and to be all but ignored by the great mass of the profession. But things are so no longer."

Rides for Invalids.

From *The Boston Medical and Surgical Journal* we learn that a Boston Society engages itself in the work of providing free rides for invalids during the warm months. From last May to the present month 1343 persons were given rides. In addition, 1400 car tickets and 640 round tickets on the harbor steamers were distributed. A most excellent and wholesome charity, well worthy of imitation.

Cremation.

Dr. L. Ehrhart, a German physician, 75 years of age, of Allegheny City, was cremated in Dr. Le Moyne's furnace, at Washington, Pa., on Monday, Nov. 27th. This made the fifteenth cremation in the Le Moyne furnace, six of the bodies being from New York.

Items.

—The celebrated Prof. Friederich, in Heidelberg, died on the 6th of last month. His work on "Progressive Muscular Atrophy" belongs to those which make his name known the world over.

—Mr Clon Stephanos made several researches into the death rate in Greece during certain seasons, and has communicated to us the statistical results, which exactly correspond with the observations of Hippocrates on the same subject.

A Peculiar Case.

In Homer Bronson's garden, in Waterbury, was buried the arm he lost last August. He complained that the arm felt tired and cramped, but he experienced instant relief when, without his knowledge, the arm was exhumed and reinterred in a different position. Three times the severed limb has been moved, to give relief to the sufferer, and each time successfully.

The above we find reported in a reputable and reliable daily journal. An explanation we cannot give, but notice it in passing.

OBITUARY NOTICES.

PROF. HENRY DRAPER, M.D., LL.D.

Prof. Henry Draper died suddenly, in New York, Nov. 19th, 1882. Although only 45 years of age, he had already attained a foremost position in the scientific world. He was born in Prince Edward County, Va., his father being the distinguished chemist and physiologist. He graduated in medicine in 1858, and after a course of study in Europe, returned to New York and was attached to the staff of Bellevue Hospital. His predilection for scientific pursuits, however, induced him to relinquish the practice of his profession, although he occupied for some years the chair of Physiology in the medical department of the University of New York. He was a most enthusiastic astronomer, and perhaps his most remarkable achievement was the discovery of oxygen in the sun, which was made in 1877.

In 1872 Prof. Draper obtained a photograph of the diffraction spectrum, which has never been excelled. It comprised the region from below G. wave length 4350, to O, wave length 3440, on one plate. Small portions of the diffraction spectrum have since been taken on a larger scale, though none of them were veritable for determining the relative wave lengths of the fixed lines. Secchi, in his masterly work on the sun, used an illustration from this photograph of Prof. Draper's, and the British Association recognized its value by reproducing it and indorsing it as the best that had ever been taken. The transit of Venus, in 1874, afforded an exceptional opportunity for the display of perfected photography, and Prof. Draper, as its ablest exponent, was appointed superintendent of the photographic department by the commission which was sent out by this Government to observe the phenomenon. His work was so successful and so gratifying to scientific men, that it attracted the attention of Congress, which ordered a special gold medal to be struck off and presented to him. This was done, at the Philadelphia Mint. The memento bears the Latin inscription "Decori decus addit avito," "He adds lustre to ancestral glory." This was the first instance in the history of the United States, that any such public recognition was given by Congress to a scientist.

His death was due to a pleuritic affection, contracted a couple of months ago, when, on a visit to the Rocky Mountains, his party were caught in a severe storm. He was an ardent sportsman and very popular in a large social circle.

ISAAC B. MULFORD, M.D.,

died recently, at his residence in Camden, N. J., of paralysis of the heart. Dr. Mulford was born in Millville, N. J., in 1843, and was in the thirty-ninth year of his age. Entering the West Jersey Academy early in life, he completed his collegiate preparatory course at Monticello Institute, N. Y., and entered Princeton College in 1861, graduating with the degree of Bachelor of Arts in the Class of 1865. After the completion of the course at Princeton, he entered the Medical Department of the University of Pennsylvania, graduating as a Doctor of Medicine in 1870. Entering upon the practice of his profession in Camden, he soon gained the confidence and esteem of the community, and was regarded as one of the most cultured and successful physicians in Camden. He was a member of the Camden City Medical Society, ex-president of the Camden County Medical Society, member of the Medical Society of New Jersey, the New Jersey Sanitary Association, the American Academy of Medicine, the American Medical Association, and surgeon of the Sixth Regiment N. G., N. J. He was buried at Millville, N. J., on Friday.

DR. C. C. COX,

who had been successively Lieutenant-Governor of Maryland, Commissioner of Pensions, President of the Board of Health of the District of Columbia, and Commissioner to the Australian Exposition, died in Washington on Saturday night, Nov. 25th. He was a graduate of Yale College, and his literary attainments were considerable, some of his published poems having secured wide circulation. He leaves a widow, one son and a married daughter.

DR. JOHN S. WHILLDIN.

Advices from St. Paul, Minn., announce the sudden death, from heart disease, in that city, of Dr. John S. Whilldin, formerly of this city, and a son of Mr. Alexander Whilldin, the wool merchant. Dr. Whilldin was a graduate of the University of Pennsylvania.

QUERIES AND REPLIES.

S. D. P.—1. Puerperal fever is exceedingly contagious. 2. Yes. 3. No.

F. M. C.—Many articles and methods have been suggested to conceal the odor of Iodoform. By reference to the REPORTER for April 29, 1882, p. 467, you will find what is probably the best.

MARRIAGES.

BATEMAN—LAWRENCE.—On Wednesday, Nov. 1st, by Rev. George L. Smith, E. R. Bateman, M.D. and Mary P. Lawrence, all of Cedarville, N. J.

BLAUVELT-DEDEREO.—On Thursday, Oct. 19th, at the residence of the bride's parents, Sparkill, N. Y., by Rev. W. O. Stitt, Gerritt Franklin Blauvelt, M.D., of Nyack, N. Y., and Julia Thompson, daughter of Isaac M. Dedereo.

DEATHS.

SANFORD.—At Ravenswood, L. Island, on Monday morning, Oct. 30th, 1882, Samuel T. W. Sanford, M.D.

TOWNSEND.—At Glen Cove, L. Island, on Monday, Oct. 30th, 1882, James C. Townsend, M.D., in the 86th year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 1345.] PHILADELPHIA, DECEMBER 9, 1882. [Vol. XLVII.—No. 24.

Original Department.

Lecture.

THE INFLUENCE OF CONSTITUTIONAL DIATHESES ON TRAUMATIC LESIONS.

BY M. PAUL RECLUS,

Professor Agregé of the Paris Faculty.

Gentlemen: Formerly the traumatism attracted the entire attention of the surgeon, and little attention was paid to any constitutional defects in the patient himself, in his surroundings or diet. It is true that it was proclaimed, as a matter of theory, that the diverse cachectic conditions retarded the cure of wounds, but practically the doctrine received little attention, except, perhaps, that it induced non-intervention in cases of anal fistula when the subject was in advanced phthisis. It would be impossible to find any memoir which treats of the influence of the constitutional condition on the course, evolution and issue of the malady. It is M. Verneuil who has undertaken this task, and has shown us, by numerous clinical facts, how any constitutional diathesis reacts on wounds.

We are now acquainted with the ordinary evolution of wounds in subjects affected with syphilis or alcoholism, diabetes or scrofula, malaria or rheumatism, and also with the manner a hidden diathesis may be awakened or revived through the perturbations induced in the system by the reception of a traumatism. Analysis has even been carried further; two diabetic conditions exist sometimes in the same subject; a drunkard may also be under the influence of malarial poisoning; syphilis may co-exist with phthisis, and certain facts prove that the wound or malady may be influenced in different degrees by the two diatheses. We already possess a thesis on syphilitic iritis in scrofulous subjects.

It is on this account that a traumatism may induce entirely different effects in different subjects.

An individual receives a blow on the testicle; if the organ is in a normal condition and the subject not under the influence of any well established diathesis, simple inflammation will occur: if he is scrofulous, cheesy masses will be deposited in the parenchyma of the organ, a veritable tuberculous orchitis supervening; if the individual is syphilitic, sclerosis or gumma may be formed; finally, a cancerous deposit may appear in an arthritic subject.

To explain these facts the terms "predisposition or idiosyncrasy" were formerly used, but are gradually being replaced by more precise notions: idiosyncrasy or predisposition merely point to some hidden diathesis which has, in a certain number of cases, been finally brought to light.

A well defined term now replaces the vague term under which the malady remained confounded with other constitutional conditions. Do we not know, for instance, that, after operations, the individuals "predisposed" to gangrenous inflammation are almost always diabetic? And this idea has become so thoroughly established, that even the most daring surgeons rarely undertake an operation of any importance without a preliminary analysis of the urine.

This research for any existing diathesis bids

fair to become of very great importance in the consideration of prognosis after operations.

To mention a case in point, I operated, in concurrence with M. Collin, who aided me in placing a suitable apparatus, in a case of talipes equinus, of paralytic origin.

Notwithstanding the greatest care, there supervened, at the point of the heel and over the head of the first and fifth metatarsal bones, a gangrenous eschar, which, fortunately, did not spread far or prevent ultimate cure, with an excellent result. To explain this localized gangrene, should we say that the patient was "predisposed?"

We recall the memoirs of MM. Verneuil and Nepven, on the trophic ulcers of limbs affected with infantile paralysis. In some of the cases they reported the muscles and integuments equally suffered, showing that operations on paralyzed limbs should be undertaken with great caution, for the skin cannot bear a pressure which would be of no danger for an individual in perfect health.

M. Verneuil has then substituted for the terms "predisposition and idiosyncrasy," certain very clear propositions. In his opinion: 1. The healthy individual may contract a multitude of lesions, affections or maladies; he is not specially predisposed to any of them. 2. The "predisposed" individual is one who presents in some part of the system an anatomical defect, affecting a tissue, an organ, a solid or a fluid, or a physiological disorder deranging some function or propriety of the economy; it is a subject who has been ill or is about to become so. 3. The predisposition is simply the defect, the disorder, the point of least resistance. It is the anterior condition, known or unknown, hidden or suspected, which, with the adjunction of some perturbing influence, will induce the appearance or reappearance of a lesion, an affection or a malady. 4. As a state of absolute good health is very rare, each individual has his predisposition, if he has not several. It is true that the predisposition may remain hidden if no great perturbation of the system bring it to light. 5. Predisposition thus considered presents nothing mysterious; it may be exceedingly difficult to divine its presence or demonstrate its existence, but not more so than to establish, in many cases, a satisfactory diagnosis. 6. Exact knowledge of a constitutional predisposition affords great aid for prophylaxis and treatment.

And this is not all; besides these constitutional states and diatheses there may exist certain local derangements which cause a tissue, an organ, an apparatus or a system to become what the ancients termed "a point of least resistance." This idea was long lost sight of, but its reality has been demonstrated by incontestable facts. It is well known that the local manifestations of certain general diseases do not affect indifferently any part of the organism; the points chosen are those already enfeebled by some anterior alteration.

A weak spot, the result of an old wound, may become, under the influence of a general disease supervening sooner or later after its cure, the starting point of a new affection.

It is thus that we have seen syphilis attack old cicatrices; cancer invade tumors that have long appeared benign; rheumatism attack joints formerly affected; scrofula a limb atrophied from infancy, and typhoid fever induce a fresh attack of osteitis in a bone formerly affected.

Since 1876, less than a year after the presentation of M. Verneuil's memoir at the medical congress at Nantes, I have essayed to demonstrate that the testicle is often, in tuberculosis, a point of least resistance.

In an individual whose constitution is otherwise good, the spermatic gland may, through diverse causes, become a favorable point for the development of tubercle, and a shock or blow incapable of affecting any other point of the organism may here induce a morbid deposit.

Out of 60 observations of tuberculous disease, we found that in 36 cases the lungs and the genito-urinary organs were simultaneously attacked, while in 24 cases the spermatic gland alone was affected, and that after a simple bruise, a blow, or under the influence of inflammation propagated from the urethra.

And does not the same hold true for syphilis of the testicle?

Even those who have been least preoccupied regarding this point of general pathology, bring their contingent of proof: "If, as they say, the testicle is the oftenest attacked, it is because the organ is fatigued by excesses, its tissues are not in proper condition to defend themselves, and syphilis finds in them a "point of least resistance."

According to Fournier, syphilitic sarcocele often results "from veritable overwork, violent and prolonged venereal excesses."

Syphilis has a special tendency to affect a testicle which has been the seat of anterior inflammation, such as gonorrhœal orchitis. "This is," says Ricord, "one of the most powerful causes of the development of syphilitic sarcocele. And in his opinion, the influence of anterior in-

flammation is such that the accidents may not follow their usual order of succession." There is a change in the course of the disease which, instead of commencing in the testicle itself, first attacks the epidermis."

Again, he says that it is only in cases where particular circumstances have acted on these organs that the tumor is developed.

The importance of M. Verneuil's researches can be readily understood. In reality, the etiology of a malady is a guide to its treatment, and every conquest in the domain of causation has, as a consequence, a like progress in therapeutics. Contemporary surgery should then have higher aims than the improvement of methods and the seeking for new methods of operating; it should seek particularly to avoid any operation "which is simply an expedient, a last resource, when nothing else can be thought of."

M. Verneuil particularly condemns those impatient and daring surgeons who, without establishing a precise diagnosis, perform operations which, from the nature of the circumstances, can have no favorable issue. The nature of the antiseptic dressings in use save them ordinarily from an immediate catastrophe, but what results do they hope to obtain?

And it would seem that it is not alone "the seekers of adventures" who wish to acquire éclat by the daring nature of their operations. A sort of "delirium for operations" seems to have attacked the entire generation of surgeons. At a recent medical congress in Germany, one surgeon reported having removed the entire larynx and a part of the trachea; another had removed also the tongue and pharynx; a third, a part of the œsophagus. Extirpation of the kidney, spleen, uterus, and resection of the stomach, colon and rectum were cited as of ordinary occurrence. And these operations were performed for cancerous tumors of rapid and fatal recurrence.

When a patient will necessarily die in a few days or a few months, is it justifiable to inflict such mutilations, which sometimes cause his death during or just after the operation?

If such was the only danger from this fury for operations, the lives of a few unhappy beings would be shortened, and that is all.

But detestable habits are thus acquired; the case is not properly studied, and no clear diagnosis is arrived at. The tumors are not even studied as to whether they should be removed or not. They are, first of all, extirpated; it is then for the pathologist in his laboratory to determine their nature, malignant or otherwise.

But, if the excessive zeal of the surgeons of our day is to be condemned, it must be said that ordinary therapeutic measures accomplish little. The surgeons do too much and the physicians too little. These last show a lamentable indifference in the treatment of neoplasms; they are satisfied in prescribing, intus et extra, the inevitable iodide of potash and arsenic, which is no doubt of advantage, but leads no further toward cure than the other.

"Under such circumstances, instead of falling into despair with the fatalists, why should we not seek for indications for treatment at the only source which can furnish them, that is, in etiologic studies? Why reproduce again and again the same old doctrines on the origin of cancer and similar products, instead of utilizing and verifying the important idea that the true neoplasm derived its origin directly from arthritism." (Verneuil.)

You well remember the views of M. Bouchard, who demonstrated that slowing-up of nutrition or bradytrophy is a primary factor in the causation of the arthritic condition of the system, of which the most ordinary manifestations are gout, obesity, biliary lithiasis, gravel and saccharine diabetes. Perhaps cancer could also be included in this list, but the ideas of M. Verneuil on the subject are not so generally admitted as he may believe; he has long affirmed that cancer has its origin in the arthritic diathesis, but clear proofs of the assertion are still wanting.

However, as he himself remarks, in the introduction to his memoir, "with this view of the origin of cancer there might remain some hope of one day arriving at means for its prevention and cure. There would be some attempt to combat and destroy this neoplasm of arthritic origin, just as we at present prevent, combat and destroy the neoplasm of syphilitic origin which was formerly removed by the bistoury; as we cure also the simple inflammatory neoplasm, and in certain cases the morbid product of strumous origin, by favoring the cheesy or fibroid metamorphosis of the tubercle."

Amputation at the Hip-joint.

The *British Med. Jour.* says that two cases of amputation at the hip-joint were performed at the South Devon Hospital during August. The first case, by Mr. Paul Swain, for exhausting suppuration of the limb, is quite convalescent. The second, by Mr. Square, for rapidly growing malignant tumor of the shaft of the femur, in a man aged 19, is progressing favorably towards recovery. In both cases, Davy's lever was used to control the artery, with success.

Communications.

A PLEA FOR MILDER MEDICATION AND GENTLER MANIPULATION IN THE TREATMENT OF URETHRITIS, ACUTE AND CHRONIC.

BY JOSEPH H. WARREN, A.M., M.D.,

Physician to Massachusetts Home for Intemperate Women, Boston.

Many cases of acute gonorrhœa, through neglect or bad treatment, pass into a chronic urethritis, characterized by more or less pain, tenderness, and a muco-purulent urethral discharge. If this is allowed to continue it finally passes into the chronic affection known as gleet. The tissue usually involved is the urethral mucous membrane, especially in the vicinity of the lacunæ of the fossa navicularis and of the bulb.

But the inflammation may not stop here; it may progress until it has involved, in the male, not only the bladder, but also the prostate gland and the testes. In the female the clitoris and the vaginal mucous membrane may be affected, and then the inflammation may attack the cervix of the uterus, and if still further neglected, may involve the fundus and extend up the Fallopian tubes even to the ovaries. More than this, I think it will be found the inflammatory process may invade tissues deeper than the superficial mucous membranes, until finally the submucous tissues ulcerate and melt away by suppuration.

This state of things follows a simple gonorrhœa much more frequently than many of the profession generally suppose. As soon as the patient is relieved of the inconvenience of the burning and the smarting pains during or after micturition, and of the thick, purulent discharge from the urethra, nothing is simpler than for him to trust to good luck for his final cure. Possibly, however, he may consult his friend, the prescribing apothecary, and be assured that his gonorrhœa is cured and that the gleet will take care of itself.

When these patients come to us for treatment at a period varying from fifteen days to three months, or later even, after the beginning of their gonorrhœa, the question of how we shall best succeed in giving relief is a very important one. If the case has been progressing some length of time we shall find, upon external examination, considerable tenderness to the touch all along the urethral tract, and particularly at the bulb and within an inch of the glans.

Upon passing the sound we find considerable urethral irritation, and usually one or more contractions or strictures. These strictures, in most cases, can and should be overcome by the repeated passage of bulbous bougies. For this operation I am greatly pleased, as well as some other prominent men in the profession, with my vermicular sound, here figured. The reader, however, can gain from the figure only an imperfect idea of their shape, of the comfort, both to patient and operator in their use, and of their good and satisfactory results in the treatment of urethral strictures. These sounds, of various sizes, are made very finely by Geo. Tiemann & Co., of New York city. The bulb is fastened on a German silver staff, so it can be bent to any desired curve.

After dipping the sound into carbolized cosmoline I usually powder over it iodoform, which is carried along the urethral canal by the partially grooved vermicular tip and deposited for the most part at the seat of the obstruction. During the treatment by dilatation I order the patient to take quin. sulph., gr. v, t. i. d. before meals, to be followed by sodii brom., gr. x–xv. I might here say that in my practice I have found the bromide and the carbonate of soda to be almost a specific for irritations of the urethra and the uterus. At night I order the following urethral suppository to be used:—

℞. Iodoformi, gr. xx
Ac. tannici, gr. x
Ol. theobromæ, q. s. M.
Ft. suppos. urethr. No. x.

In the meantime the bowels should be kept freely open with some saline mixture, or with a teaspoonful of pulv. glycyrrhizæ comp. at night. If the inflammation is very active, the patient should be directed to procure some small rubber tubing, say an eighth or quarter of an inch in diameter, and slit down one end for about half an inch, in order to introduce it the more readily into the urethra. Now, take a gallon or two of water, as hot as can easily be borne, and bathe the urethra; and a few ounces, if necessary, can be thrown, by means of a catheter attached to the tubing, into the bladder; the bladder should be thoroughly washed out by making a siphon of the tubing. This douche may be repeated as often daily as is agreeable to the patient. Instead of clear water, a weak solution of the tannate of lead will often be found a very soothing application; twenty grains to the quart is the most suitable in the largest number of cases. Many cases that I formerly thought impossible to divide or dilate I

now divide with the Cook's (?) knife, which consists of a long, slender shank containing a blade that can be pushed out at the side. This is more convenient than the most of such instruments, because the amount of cutting edge displayed can be more easily gauged by the operator than with the common urethrotome; in my hands, at least, I find it so, with but few exceptions. Many old chronic cases, like two that I have now under treatment, experience great relief from gleet and the various sequelæ of gonorrhœa, such, for example, as gonorrhœal rheumatism, by the use of the urethral suppositories at night, the hot douche in the morning, and the following prescription night and morning:—

℞. Ac. salicylic,	gr. x	
Sodii brom.,	gr. xv.	M.

One of these patients to whom I have referred had been treated for three years by different physicians, for some kidney affection, has taken iron and quinine for general tonics, and yet, six weeks ago, he could not attend to his business as a merchant for more than a few hours a day. Under the treatment which I have described above for such cases, he says he is now as well and strong as ever in his life.

In some of these cases there is more or less swelling and tenderness of the testicles and spermatic cord, and often cystitis, dyspepsia and hypochondriasis. These symptoms may often be removed by adding sodii hyposulphide, ℥j to each gallon of the hot water employed in the douches, and at same time taking a wineglassful of this solution after meals. This same salt, in a more concentrated solution, will be found very advantageous in the treatment of vaginitis and acute urethritis, and it has the recommendation of being cheap and not staining clothing. I speak from a long experience in the use of this salt; and some twenty years ago I wrote an article in the Boston *Medical and Surgical Journal*, on the use of the salt in inflammatory rheumatism; and I have also found it useful in relieving the distress of cicatrices from burns. I am afraid, however, that, owing to its cheapness, it, like Glauber's salts, for example, is discarded for more expensive but no more efficient drugs.

In conclusion, I ask myself if, in the treatment of acute gonorrhœa, we do not resort too hastily to over treatment with copaiba, cubebs, injections of zinc sulphate, nitrate of silver, fl. ext. hydrastis canadensis, and thus bring upon the patient many of the sequelæ so often seen. Gonorrhœa is a local disease, but when neglected it may lead to all the affections above named, and even to far more severe constitutional disturbances. I think it can be readily cured by the frequent injection of tepid water, and the internal administration of sodæ bicarb., or bromide of soda, with mild demulcent drinks, such as that made of medulla, sassafras, linum, or flaxseed, barley, or quince seed; we can add to these agents, to allay painful erections, morphia in syrup tolu, aq. camphor, ether nit., or spirits ether comp.; cosmoline, with two and a half grains of ext. belladonna, or one-eighth of a grain of sulph. atropia, to the ounce, applied freely about the parts, will generally give comfort and ease to our patients, with results far more satisfactory to all, and less of the sequelæ so numerous with the more heroic and hasty methods much in vogue, I have already mentioned. Besides, I think the sound is passed, in many cases, too early in the acute stage of the disease. Although the use of the sound is a very valuable agent to be employed for the cure of this affection, it should be used with caution, and at the proper stage of the disease. I have seen fearful results follow the careless use of the sound. I have for years given my patients, the night before passing the sound, opii, with a full dose of sulph. quinia, as a caution of safety, and to lessen the complications so apt to follow without such precautions.

VERNEUIL'S MODIFICATION OF AMUSSAT'S OPERATION FOR THE RELIEF OF IMPERFORATE RECTUM.

BY WILLIAM A. BYRD, M.D.,
Of Quincy, Illinois.

At the meeting of the Tri-States Medical Society, in St. Louis, in 1881, I read a paper on "Lumbo-Colotomy in the new-born, for relief of imperforate anus," that has been pretty generally abstracted in the medical journals, and fairly represented in Dr. C. B. Kelsey's excellent book on "Diseases of the Rectum and Anus." The plan there described I believed to be more applicable to cases presenting like difficulties than any other so far designed; but there are cases in which the distended *cul de sac* of the rectum may be felt slightly fluctuating by passing the finger within the rudimentary anus; such, I believe, will be more successfully treated by the method named as the title of this paper.

Dr. Van Buren, in his work on "Diseases of the Rectum," 2d ed., p. 372, states, "Amussat, in the year 1835, devised the novel resource of dragging down the upper rectal cul-de-sac and stitching it to the edges of the perineal opening, thereby establishing a canal continuously lined by mucous membrane, and, consequently,

free from danger of contraction;" then, on page 373 he says, "By way of enlarging the external opening, so as to aid in finding and detaching the rectal pouch, Prof. Verneuil, of Paris, has exsected the coccyx in several instances, and speaks well of this addition to Amussat's operation, as enabling him to advance more readily along the concavity of the sacrum."

Aug. 29th, 1882, I was called, with Dr. M. Rooney, to see Henry T., a child four days old, that had imperforate rectum. The child was very small and feeble, not having had more than eight months of uterine existence. Owing to its feeble condition the parents objected to having any operation performed for its relief, although all the physicians present, among them Dr. J. H. Ledlie, of Pittsfield, Illinois, strongly advised it. The next day we were sent for, the parents having decided, after talking to their preacher, that it was better that some effort should be made, than allow it to die miserably without it. So, in the afternoon, assisted by Drs. M. and A. L. F. Rooney, Henry Hatch and E. B. Montgomery, the operation was performed. There was a rudimentary anus nearly half an inch deep. The incision was made within it at the front, extending back about an inch, and about an inch in depth. The pelvis being very narrow, and wishing more room, so as to avoid the possibility of wounding the bladder or the ureters, I cut away the entire coccyx, which permitted the incision to be easily made an inch deeper, when the dark gray pouch of the rectum filled with meconium came into view. This was now dragged down and the end cut off and the edges stitched into the part of the cut where the anus should have been, with several fine catgut sutures. The child made an excellent recovery, is growing rapidly, and is now in robust health.

Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. Seelye, A.M., M.D.

Hemiplegia.

The patient was admitted to the hospital on Oct. 3d, 1881. His name is J. P. Age, 55. Nationality, Swedish. Is unmarried. Has been a sailor for the past twenty-five years, and so was much exposed to rough weather. Is also an old drinker. Until within the last two months he has been perfectly healthy for the past twenty years. Before that he had an attack of rheumatism in the ankles, which lasted three weeks. Has also had the clap. Two months ago he began to have a dull, heavy feeling in his head, and was troubled with vertigo. About three weeks ago he went to bed feeling as usual, but in the morning when he awoke he experienced a peculiar sensation in his right arm and leg, and found that he could not move them. On attempting to speak, he could not articulate well, nor say what he wanted to. It has been difficult for him to talk, and his speech has been thick and imperfect since then, but is now much improved. He is also able to walk now, but he drags his right leg behind him, and it scrapes along the floor. His bowels have been normal in action, and his appetite good.

Gentlemen, I wish you to notice the method followed in these histories which you hear read here. For it is a great accomplishment to be able to take a good history. The traditions of this hospital regarding this matter are, I think, admirable. It embraces, in a few words, the noting down briefly the patient's previous history, and his age, sex, nationality, condition in life, occupation, habits, family history, and the history of any previous illnesses which may bear upon the history of the present trouble. The age, sex and condition of the patient often have much to do with the nature of the disease, and the hereditary history is the most important of all.

Having now heard the subjective history of this patient, I need not ask you as to the nature of his malady. He has, in a word, hemiplegia. Now what shall we examine for, in a case of hemiplegia? Obviously we will first look for the causes of the disturbance in the power of motion.

Inspection.—We see nothing about the facial muscles in this case to especially attract our attention. But I notice a slight dropping down of the right side of the face, and the right corner of the mouth is a little lower than the left. He uses the orbicularis oris and buccinator muscles well, however, and is able to whistle. So far as the face is concerned, there is no appearance of paralysis. He can raise his right arm slowly and can flex the elbow. His grasping power with his right hand is very feeble, but he has a strong grip with his left. In walking he drags his right foot, and there is evidently a considerable loss of power. In cases of this kind it is often desirable to estimate the loss of muscular power as accurately as possible, and for this purpose we have an instrument called the dynamometer, by which we can test in pounds the strength of any part. It consists essentially of a spring, a needle, and a scale marked off in pounds, numbering in this case from ten to ninety-five. On testing this man we find that with his right hand he scarcely moves the index, but with his left he sends the needle around to nearly its whole extent. So here we have demonstrated accurately the difference in power on the two sides of the body. Next we will investigate the function of sensibility. This we can do roughly by pulling the hair, or pinching or pricking the skin, but more accurately by the use of the æsthesiometer. Examining this man thus, we find that there is no difference in sensibility of the two sides of the face, and there is but slight loss of sensibility in the right hand as compared with the left. It is often the case in hemiplegia, that there is little or no loss of sensibility. This man does not see double, and

there is no disturbance of vision. There are still other symptoms in hemiplegia, for which it is important to examine. We should test the electrical sensibility of the muscles, and look for any spasmodic movements, or for clonic or tonic spasms of the muscles. This man's joints are all flexible, so it is certain that he has no tonic spasms or cramps.

We now come to the investigation of the most important element in this case. You remember he awoke one morning with loss of speech, and he could only mumble his words. Now he has somewhat recovered, and on asking him questions he gives intelligent answers, and makes a correct selection of his words, but he repeats them slowly and with some difficulty of articulation. He has not, therefore, amnesic aphasia. He cannot pronounce the letter "V" correctly, but says "We" instead, and "wine" for "vine." There is, therefore, still a certain amount of incoördination of the muscles necessary to pronounce certain letters. This general loss of power was first noticed on the twenty-sixth of September, and now, on the seventeenth of October, he has gained considerable power in both his upper and lower extremities, and his speech is very much improved.

In considering the causes of hemiplegia it is important to examine the heart, arteries and kidneys, and their functions. But we will not linger longer on this case now, but will consider these and other points in connection with the next case, which is one of similar character.

Case 2.—This patient was admitted to the hospital on Oct. 13th. Name Wm. M.; age 36; nationality United States; occupation printer; is unmarried. Four days ago he was found lying in bed, speechless, and paralyzed on the right side; and he was brought here in that condition. He has remained so ever since, with no improvement.

One of the students was now called down into the amphitheatre to examine the case, and the following symptoms were noticed: The muscles of the face and eyes were normal in action. When the eyes were shaded and uncovered alternately, it was found that the left pupil did not respond to the light as well as the right, and it was slightly dilated. When the tongue was protruded it deviated slightly to the right side. The arms and legs were flexible, and there was no rigidity of any of the muscles. The surface sensibility was about normal. The right hand moved the dynamometer index needle only about two pounds; the left hand, eighty pounds. He was able to raise the right leg from the bed and move it freely. This man being dumb, and not so clear in his mind as the other patient, it is not so easy to get much information from him. Another important point in the examination is, to test the power of reflex excitability. As a rule, in hemiplegia this is not seriously disturbed, because the lesion is high up in the cerebrum, while the spinal cord is usually left intact. On tickling this man's feet we find no exalted reflex sensibility here. When asked his name he tries to tell it, but cannot. but repeats "name, name," several times. And so with other questions; he cannot use the word that he wishes to, though he knows what he wants to say; for when asked how many brothers he has, he counts off three on his fingers. Sometimes these patients also lose the power of gesticulation, and cannot even write their own name, though they know what it is, perfectly well. Where the aphasia is simply due to incoördination of the muscles of speech, it is called ataxic. But where the memory of words is lost, it is called amnesic aphasia. Both may be present in the same patient. This man has the ataxic form, and probably the amnesic also, to some extent, though it is not easy to say certainly.

His arteries are felt to be slightly rigid or stiff, but not markedly so. The heart sounds are natural and the position of the apex beat normal, as is also the area of percussion dullness. So there is no cardiac hypertrophy. The urine is negative. In the first patient the heart and the urine are normal, but the arteries are decidedly stiffened, showing some atheromatous degeneration.

Gentlemen, you have now seen two cases of right hemiplegia, and observed certain likenesses in the symptoms of the two patients. The first patient is recovering from his aphasia, while the second is still affected to a considerable degree. He has not the power to say "yes" or "no."

In considering the causes of hemiplegia, we must distinguish between an attack with a sudden onset, and one of slow occurrence. A sudden attack may be due to either cerebral embolism, hemorrhage, or thrombosis; or it may sometimes follow an epileptic seizure, in which the symptoms are generally more marked on one side than the other, and there is usually a transient loss of power. The explanation of these epileptic cases is not thoroughly understood. Some say that the attack is due to the sudden constriction of the blood vessels, thus causing an anæmia of the brain; others, that it is caused by the exhaustion after a great and sudden expenditure of nervous energy. Hemiplegia is sometimes seen in hysteria, though it is rare as compared with loss of power in certain groups of muscles, as those of the leg, arm, etc. We can usually distinguish these cases by the fact that they are generally anæsthetic on the side where there is loss of power.

In cases of hemiplegia the diagnosis must be more accurate in these days than formerly. Then, if a man suddenly fell down, and was found to be paralyzed on one side, it was always referred to apoplexy or hemorrhage. Within the last fifty years the causes have been carefully investigated, and now the diagnosis of the exact location of the lesion is one of the most interesting problems of medicine. I will leave you to ascertain for yourselves the locations where hemorrhage and embolism are most likely to occur, and to study up the symptoms which may follow hemorrhage into the brain. My object here is not to tell you all about this affection, but only to say enough to excite your interest in studying up the subject of hemiplegia, and the location of the lesion which causes it. The lesion in these patients is on the left side of the brain, and in the region of the speech centre and motor tract, which is located behind the third frontal convolution, in the vicinity of the island of Reil, and in the parts supplied by the middle cerebral artery.

It is difficult to distinguish paralysis due to embolism from that caused by cerebral hemorrhage. But there is one condition, which, if present, renders the diagnosis of embolism probable, and that is valvular disease of the heart. The vegetations which form on the heart's valves are liable to become detached and so cause an embolism. This old man would be more likely to have a hemorrhage. The younger patient might have an embolism, but as he has never had rheumatism or heart disease, by exclusion we arrive at the probable diagnosis of hemorrhage on the left side of the brain. It may be located in the corpus striatum, which is the most frequent seat of hemorrhage. The optic thalamus is probably not involved, because there is such slight loss of sensation. It may also be in the white substance of the brain outside of these localities, or even in the gray matter of the convolutions. Wherever it may be, I do not think that the clot is very large in the case of the first patient, for improvement has been tolerably rapid thus far, and so he will probably recover his powers to a considerable extent. The other patient, having been here only four or five days, I cannot say how rapid the improvement will be in his case. He already has some use of his lower limb, which is usually the first to recover. The loss of speech here is so complete that the prognosis for the aphasia is very poor.

UNIVERSITY OF THE CITY OF NEW YORK.

CLINICAL LECTURE BY ALFRED C. POST, M.D., LL.D.

Professor Emeritus of Clinical Surgery.

GENTLEMEN:—This patient, æt. 65 years, about six weeks ago received a blow upon the shoulder, which afterward was said to be dislocated. Dislocation of the shoulder from a blow is of rare occurrence. The patient was under the influence of alcohol at the time, and his recollection of what happened is not very distinct, and it is probable he fell. If the shoulder was dislocated it has been reduced since, for there is no sign of dislocation at present. On comparing the two shoulders with each other, you can see that there is about the same amount of fullness or the same rotundity about both joints. If there were a dislocation downward into the axilla, or a sub-glenoid dislocation, as it is called, you would find the sharp prominence of the acromion very conspicuous. There would be a depression beneath it, into which you could lay two or three fingers, and by putting your finger into the axilla you could feel the head of the bone in its abnormal situation. There may be three other dislocations of this joint. Two of which are complete and the other incomplete. Of the two complete dislocations, one is forward under the pectoral muscle, sometimes called dislocation under the clavicle; and the other, which occurs very rarely, is a dislocation in which the head of the humerus is thrown backward on the scapula. But in all of these cases the abnormal position of the bone is quite conspicuous, and you observe the sharp prominence of the acromion and the hollow beneath it, and the want of fullness and rotundity which exists in the normal condition. It is clear, then, that if this patient has had a dislocation it has been reduced, and has remained reduced. You know that dislocation of the shoulder, when reduced, often recurs. A very slight accident will repeat the dislocation. A patient was at our clinic last Saturday, in whom a dislocation at the shoulder had recurred five times because it had not been properly secured in the first instance. There is this peculiarity about relapsing dislocations, that you can very easily reduce them. You will remember that in that case I did not etherize the patient, simply put my knee in the axilla, took hold of his arm and reduced the dislocation without any difficulty. That cannot ordinarily be done in dislocation in the first instance.

The patient complains of a little pain in the middle space, between the shoulder and the elbow, and there is a little discoloration of the integument here, which may be the remains of an ecchymosis which occurred at the time of the accident, six weeks ago. It takes a considerable time before a discoloration from an effusion of blood into the subcutaneous tissue entirely subsides. Here is also a little lump, perhaps due to a slight effusion beneath the periosteum. It is probably a matter of no consequence. Such a nodosity might indicate the seat of a fracture which had occurred at some previous time, but he says he has had no fracture. If such a nodosity had occurred upon one of the more superficial bones, as upon the tibia or the ulna, it would very naturally excite a suspicion of syphilitic disease. It is not very common, however, for a deeply situated bone, like the humerus, to be the seat of nodosities from that cause.

There has been, from the same injury, some inflammatory swelling about the hand. Exactly how that was brought about the patient is not able to give a strict account. He has been painting it with iodine and applying passive motion, and he says it is better than it was a week or two ago. After making passive motion the swelling becomes greater. That is an indication that the passive motion is carried too far. As a general rule, the error is on the other side; the patient does not usually make sufficient passive motion, because it hurts him at the time. Whenever passive motion simply gives pain at the time it is made, but does not afterward produce increased swelling, and whenever the rigidity of the parts gradually diminishes under its influence, you may know it is doing good, and is not being carried too far. However much pain may be given at the time, it does not contra indicate a continuance of passive motion, unless there is increased swelling and heat of the part afterward. The patient may continue the treatment which he has been applying.

CASE 2.—It appears that this patient, aged 53 years, was raising a heavy iron bar, and it fell upon his shoulder, causing a severe contusion over the clavicle, very near the situation of the coraco-clavicular ligaments. You know that that ligamentous mass is composed of two bundles of fibres, which are described together under the name of coraco-clavicular ligaments, or under the two distinct names of conoid ligament and trapezoid ligament, both of which pass from the clavicle down to the coracoid process.

The probability is, from the continuance of the

pain and the tenderness for a fortnight after the injury, that there has been a fracture at that point. The clavicle, with reference to fractures, is divided into three regions. The first region extends from the sternal articulation of the clavicle to the inner side of the coraco-clavicular ligament, and whenever fracture occurs in this region, as a rule, the internal fragment, that connected with the sternum, lies upward; the external fragment, that connected with the acromion process, is depressed; the fragments override each other; when, however, the fracture occurs between those two ligamentous bands, both fragments are supported by ligaments passing down from the coracoid process, and scarcely any displacement occurs. The only displacement which takes place is a slight tilting up of the fractured end of the fragments, and a fracture occurring in that region is quite difficult to detect. It is not a matter of much importance if it is overlooked, for there is no apparatus which you can apply that will support the fragments and retain them in that position so well as these ligaments. I think it is probable that accident has occurred here, but it is not an easy matter to determine, a fortnight after, that it has occurred. When it was quite recent we might perhaps have detected, on careful examination, slight crepitus. No special treatment is called for in this case.

Case 3.—This little child has been here before, and is undergoing treatment for club-foot, the variety known as talipes varus. We will readjust the felt splint, the adhesive plaster and the bandage. I like this method of treating infantile club-foot much better than any of the spring shoes which are made for the purpose, for the latter are much more complicated and troublesome, and I do not think they accomplish the purpose as well.

Case 4.—This young man has a roseolar dermatitis on the outside portion of the leg, just below the knee, which has existed the last four weeks. His tongue is furred, and his face is flushed. These cutaneous inflammations are very apt to be associated with some disturbance of the digestive function, as seems to be the case with this patient. His bowels are also constipated. The main treatment should be directed to the condition of the digestive organs and general health. I think he will probably be benefitted by the use of a laxative pill, of which the following is the composition:—

℞.	Pulv. rhei.,		
	Soda bicarb.,	āā	ʒij
	Pulv. ipecac,		gr. xv
	Syr. zingiber,	q.s.	ut.

Let this mass be divided into forty pills, and take one pill three times a day, and it will generally produce a more healthy condition of the gastro-intestinal mucous membrane. This combination was introduced a good many years ago by Dr. Bulkley, the father of the present well-known dermatologist, Dr. L. D. Bulkley.

Case 5.—This woman, age 45 years, received a sprain of the ankle fourteen weeks ago. The term sprain is applied to an injury in which the fibrous tissues of a joint are put forcibly on the stretch, and in the severer cases some of these fibres are lacerated or ruptured. This accident may occur about any of the joints, but it is of very frequent occurrence about the ankle and the wrist joints, and although there is no very marked visible change in the parts which have been injured, the injury is often a more serious one than fracture of the bone of the leg or of the forearm. That is, it takes a longer time before the parts are restored to their normal condition. The immediate effects of a fracture are more severe, but the symptoms produced by a sprain may continue for a longer time, and will cause more serious trouble to the patient.

There is no visible change about the ankle in this case, except a little swelling about the sides of the joint, and there is pain and tenderness on pressure and on moving the joint. It is very important that you understand the proper manner of managing these joints, according to whether you see the case early or at a subsequent period. In the case of a very recent sprain anywhere, the patient should be kept for a few days at rest, with the part a little elevated, and if you see the patient very early, before any swelling has taken place, you may with advantage bandage the part so as to give equitable support. If an india-rubber bandage is carefully applied, not so as to restrain the circulation too much, but so as to make equal pressure on the part, it will prevent effusion into the tissues and swelling about the joint. If you do not see the patient until after the lapse of several hours, when there has been subcutaneous effusion of blood and an effusion of plastic lymph, you will find that cloths wrung out of hot water, water at a temperature of about 115° to 120° F., though uncomfortable to you will not be uncomfortable to the patient, except perhaps for an instant. There is a great difference between the effect of water considerably above blood heat and water at or below blood heat. Warm applications tend to relax the parts and to increase the flow of blood about the injured parts, while hot applications at a temperature of 115° or 120° have a tendency to constringe the vessels and to diminish the flow of blood to the parts. This is a very common practice now, in stopping hemorrhage, such as occurs in gynæcological practice. The hot water applications will stop the excessive determination of blood to the part without giving rise to inflammatory swelling.

At a later period, however, when active inflammation has begun to subside, the parts still remaining painful and tender on motion, it is not well to yield too much to the sensations of the patient. A moderate amount of exercise should be taken, and passive motion should be applied, in order to restore mobility to the joint and prevent rigidity from occurring. Although it may give pain at the time, the patient will recover much more rapidly than if the parts be too much nursed. It has been observed that injuries of this kind occurring in persons who are obliged to work are much less protracted in their effect than in persons who are entirely at leisure, and can nurse the limb for a long time. You will find that a person who is actively at work will get well in a few weeks, while a person who nurses the injured limb may suffer for months or even for years. Of course, you are to regulate

the amount of exercise, either active or passive, according to its effects, as was indicated in the previous case.

Medical Societies.

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.

Suppuration of the Middle Ear.

Read before the Association Nov. 10th, 1882, by Dr. J. G. Heilman.

The middle ear is an irregular cavity situated within the petrous bone. It is bounded externally by the membrana tympani and meatus; internally by the outer surface of the internal ear; it communicates behind with the mastoid cells; and in front with the Eustachian tube and canal for the tensor tympani muscle. Its roof and floor are formed by thin osseous laminæ, which connect the squamous and the petrous portions of the temporal bone. This cavity measures nearly half an inch from before backward, a fourth of an inch vertically and a little transversely. It is filled with air and traversed by a chain of movable bones which connect the membrana tympani with the labyrinth. These bones serve to transmit the vibrations communicated to the tympanic membrane across the cavity of the tympanum to the internal ear. It is lined with mucous membrane, as are also the Eustachian tube and mastoid cells.

From the frequent and often sudden changes in the density and temperature of the air filling this cavity, as well as its close connection with the throat, whose numerous catarrhal affections often extend into and through the Eustachian tube, we should naturally expect to find it frequently the seat of disease. Such is found to be the case by those who have given the subject attention. We shall at this time consider but one of these affections—suppuration. The importance of the subject becomes apparent when we consider the exceedingly offensive character of the purulent secretion from this cavity, the impairment of hearing that must necessarily follow an extensive destruction of tissue in this organ, *the constant danger that the suppurative process may extend into the brain* and thus destroy life, and the fact that by simple, judicious and intelligent treatment nearly all of these cases can be cured before any great amount of mischief has been done. The records of the Eye and Ear Department of the Philadelphia Dispensary show that cases rarely go on to the chronic stage when brought under its care early in the acute stage. On the other hand, by far the larger number of those who apply for treatment at our dispensaries, or at the office of the specialist, are chronic cases that have become such through neglect or want of properly directed treatment. A "running ear" is considered by the laity a matter of such trivial moment that in many cases it is deemed unnecessary to take professional advice. The usual history of such cases is about as follows: After a few days of intense earache, during which the patient, usually a child, has introduced into the external meatus a variety of substances (every one of which has cured some friend or neighbor) such as red pepper, hot lard, hot molasses, chamomile flowers, tobacco, onions, sweet oil and laudanum, chloroform, etc., etc., no relief follows and the family physician is called in, who, too often, according to routine, prescribes an opiate and *directs* the ear to be syringed with warm water and Castile soap. The drum being greatly inflamed and exceedingly sensitive, the stream of water often thrown with great force against it produces such intense suffering that this part of the treatment, after a few ineffectual attempts, is abandoned by the parents. After some days, or perhaps weeks, of suffering, the case passes through the subacute into the chronic stage. The pain has now subsided, but the discharge continues, and becoming offensive, the physician is again consulted, and, for a longer or shorter period, according to the amount of confidence reposed in him, and the financial ability and liberality of the family, he treats the case, until, having exhausted all his and most of their resources, he gives them the consoling information that the child will outgrow it. The child grows, and so does the disease; the hearing becomes more and more impaired, and the suppuration more and more profuse and offensive. In school other children refuse to sit near him, and he is now taken to some dispensary for treatment. This is the condition and the history presented by a large proportion of the cases that have come under my care at the Philadelphia Dispensary.

The causes of this affection are numerous. The following are the most common: cold air or water through the Eustachian tube or through a previous perforation of the drum, bathing in the ocean, diving, general exposure to cold, the nasal douche, dentition, puncture of the membrane by hair pin, match, etc. It is also a sequel of a number of diseases, as scarlet fever, whooping cough, measles, diphtheria. Of the latter, scarlatina is by far the most frequent cause.

The following are among the most prominent symptoms: the patient may complain of a soreness in the throat, which after a few days or hours extends to the ears. Sometimes the first symptom noticed is a sense of fullness or "stopped up" feeling in the affected ear; this is followed by a decided pain of an intermittent character, generally worse at night. There is fever and the tongue is furred. There is usually a slight chill when pus is forming. The pain now increases in intensity, the accumulation of pus in the tympanic cavity prevents the free transmission of sound, and the hearing, which in the stage of hyperæmia was morbidly acute, is almost lost; tinnitus is almost always present. After a variable period a discharge commences, at first a faint moisture, then a cream-like fluid, and at last an abundant purulent excretion. As soon as a free discharge is established the pain usually subsides and, except during acute exacerbations, is entirely absent in the chronic stage. In some cases exuberant granulations appear and fill up almost the entire cavity of the middle ear. In many cases the ossicles are separated by the destruction of their ligaments, and are discharged with the pus. Necrosis of the bony walls of the mastoid sometimes occur, and portions of these bones are discharged through the external canal. In one case under my care the outer wall of the

mastoid process was completely necrosed away and the cells destroyed, so that a cavity remained behind the ear about as large as a pigeon's egg. The patient when last seen was in a very good general condition, but, of course, his hearing on that side was lost.

The diagnosis in cases old enough to direct attention to the seat of pain is generally easy, but in young children the disease is often overlooked until the discharge appears. When a child persistenly screams and is feverish, it is well, before pronouncing it colic, to examine the ears. If there is inflammation of either external or middle ear, a little pressure over the antetragus will usually reveal it by the pain which it elicits. When the discharge appears there is no longer any doubt as to the nature or location of the disease.

The prognosis is generally favorable. In sorofulous or tubercular cases, however, or in those whose blood has become altered by some zymotic disease, the suppuration is apt to pass into the chronic stage, with large perforation of the drum and great impairment of hearing. But in cases of fair general health that are promptly treated, the discharge generally ceases in several weeks, the membrana tympani heals, and the hearing is restored. Sometimes the suppurative process perforates the cranium and extends into the brain, resulting in the death of the patient. There may be, however, from severe inflammation in this locality, marked cerebral symptoms without actual involvement of the brain or meninges. A few years ago a case under my care illustrated this. The patient was a child eighteen months old, who had a suppuration of the middle ear, of several months' standing. He developed marked cerebral symptoms and died. A post-mortem made by Drs. George Strawbridge, J. H. Packard, L. B. Hall, and myself, showed no evidence of inflammation within the cranium, except a few drops of pus beneath the periosteum. There was no perforation of the cranium. The symptoms appear to have been due to the close proximity of the inflammation to the brain, and death was attributed to exhaustion. In some cases pus becomes imprisoned in the mastoid cells, and being retained there, may cause pyæmia and even death. I believe that death is often attributed to other causes, when a thorough and careful examination would show it to have been due to disease in the middle ear.

The treatment must vary with the stage of the disease and the nature of the pathological condition. If the case is seen early, within a few hours of the appearance of pain, or when there is, as yet, simple hyperæmia, the attack may often be cut short by local bleeding, with a saline cathartic, and rest in bed. This is well illustrated by the following case: J. D., aged 35, carpenter, in good general health, was seized with intense pain in the left ear about five o'clock in the morning. He came under observation at eleven o'clock, six hours after the beginning of the attack. The pain was then so intense that he walked the floor and begged that something might be done to give him relief. The pain was aggravated by pressure over the tragus. There was some fever. On examination the drum was found to be greatly injected. Three foreign leeches were immediately applied in front of the tragus, and he was directed to go to bed. A dose of sulphate of magnesia was also given. The result of the treatment was highly satisfactory. He returned the next morning without any pain whatever; the injection of the drum was much less intense, and he expressed himself as feeling entirely well. He remained under observation for about a week, at the end of which time nothing abnormal could be detected about his ear. This case, I think, would undoubtedly have gone on to suppuration but for this prompt and decided treatment.

It is not often, however, that a case comes under observation at so early a period. Generally pus has formed, and often the discharge has commenced when treatment is applied for. If pus is detected by the bulging of the drum, it is better to perform paracentesis than to wait for a perforation to take place, as relief can thus be afforded sooner, and the cut made with a knife will heal more readily than the irregular opening made by the pus. With a good forehead mirror and speculum, to bring into view the drum, the operation is not difficult of performance. Pain is best relieved by hot fomentations. Flannel cloths, wrung out of water as hot as can be borne, and laid over the ear, answer best for this purpose. They should be changed every few minutes, and hot water should be added from time to time. This should be kept up from ten to twenty minutes at a time, and repeated every hour or two. During the intervals the ear should be well protected by a large pad of cotton, or by flannel cloths tied over it. Sometimes hot water, poured into the external meatus, will give relief. Of course this must be done cautiously. Among other domestic remedies, the core of a roasted onion, tied over the meatus, is worthy of trial. A hop pillow is also of decided value. It should be heated and some whisky sprinkled upon it, when it may be applied to the affected ear. When the pain is very great and there is much injection of the drum, leeches often give prompt and decided relief. From one to three (foreign) may be applied in front of the tragus or over the mastoid, according to the seat of greatest pain. A blister often acts equally well. The cantharidal collodion is best adapted for this purpose. It raises a blister in from four to eight hours, and seldom fails to give great relief. Throughout the entire course of the treatment cleansing is of the greatest importance. During the acute stage, the syringe, if used at all, must be used very gently, as a stream of water thrown forcibly against the drum would greatly aggravate the pain. The cavity of the middle ear may be cleared of pus by gentle inflation with Politzer's bag, or by the Valsalvian method, and the external canal may be cleansed with absorbent cotton, by means of a cotton holder, with very little discomfort to the patient, if proper care be exercised. Stimulating applications should not be used during the acute stage; indeed, they should not be used until the parts have become pale and flabby in appearance. Sulphate or acetate of zinc, of the strength of 1 to 5 grs. to the ounce of water, or nitrate of silver, 1 to 3 grs. to the ounce, may then be applied with benefit. Powdered boracic

acid, blown into the external canal in small quantities, with an insufflator, such as is used for making applications to the pharynx, has given me more satisfaction than anything else I have used. Indeed, we use it almost exclusively at the present time in the Philadelphia Dispensary. It possesses the additional advantage over most other applications, of being a disinfectant. Perhaps its efficacy depends mainly on this fact. Certain it is, that under its use a larger proportion of our patients get well than under any other treatment we have ever used. Iodoform is another remedy of great value. It is particularly adapted to cases where there is a tenacious muco-purulent discharge. It is unfortunate that its odor is so objectionable to many people, as it is difficult to get patients to use it for any length of time. I have recently had a case of three years' standing, which, after five months' treatment with nitrate of silver and boracic acid, was little, if at all, improved, that is now, after one month's treatment with iodoform, nearly well. It may be applied on slightly moistened absorbent cotton, by means of a cotton holder.

Abscesses over the mastoid are not uncommon. These should be opened as soon as pus has formed. The opening should be free and extend down to the bone. Poultices should afterward be applied and the incision kept open by the introduction of a tent until the swelling has disappeared and pus ceased to form. If pus has become imprisoned in the mastoid cells trephining is the proper and necessary thing to do. The great difficulty consists in making a positive diagnosis. Of the large number of cases treated at the Philadelphia Dispensary, we have had during the past five years but two deaths. In the one above referred to, the post-mortem demonstrated clearly that trephining could not have saved the life of the patient. In the other case, that died during the present week, although no post-mortem could be held we have no reason to feel that the operation could have saved the life of the patient. I think our experience shows that the operation is very rarely necessary.

To allay the unpleasant odor of aural discharges, syringing the ears with a weak solution of permanganate of potash answers very well. The boracic acid treatment above recommended prevents, if the applications are made sufficiently often, the offensive odor almost entirely. Frequent cleansing, however, is necessary, whatever other remedies are used. As there is in most cases throat complication, this should be treated in connection with the ear. Nasal catarrh should also receive appropriate treatment.

As regards general treatment, tonics and alteratives are required in most cases. Morphia is often necessary in acute cases, to allay the pain. The bowels should be kept open.

Occasionally there are cases in which, whenever the discharge ceases there is great pain, with fever, and sometimes apparently grave cerebral disturbance. In such cases it is not generally wise to attempt to arrest the discharge, and, should it stop, it is well to endeavor to re-establish it by poultices and other hot applications. By persistent cleansing and attention to the general health, such patients can sometimes be cured; but they are usually unpromising cases.

While in most cases the treatment above outlined will arrest the discharge and heal the suppuration, it is not wise to promise, in chronic cases, any improvement in hearing. Indeed, some cases do not hear as well after the discharge has ceased as before. In recent cases, however, the hearing generally comes back to nearly or quite the normal degree of acuteness. In cases where the suppuration has healed, but a perforation of the drum remains, it is well to protect the ears with a little cotton in the meatus during very cold weather, as the cold air in the middle ear may set up a new inflammation, and necessitate a repetition of the same treatment. This, briefly and imperfectly presented, is the treatment that I have found most efficacious in this troublesome class of cases.

REMARKS UPON THE PAPER.

In referring to treatment, Dr. H. C. Paist mentioned the successful plan of maintaining continued counter-irritation over the mastoid region, by means of creasote. This has afforded very satisfactory results.

Dr. Henry Bèates desired to direct attention particularly to the fact that the majority of instances of suppuration of the tympanum occurred during or about the period of increased development of the teeth in infancy, again, about the time of eruption of the six-year-old molar, and lastly, at the appearance of the "wisdom tooth." A very important factor in the maintenance of suppuration of the tympanum, too frequently overlooked, is the existence of carious teeth. The six-year-old molar erupts in an imperfectly developed condition, frequently deficient in enamel, which accounts for the almost constant state of caries of this particular tooth. The continuity of structure of the elements of the oral cavity and ear must not be lost sight of. In pre-natal life a structure, Meckel's cartilage, exists which is in direct continuation with the handle of the malleus, indeed, may be considered a part of that ossicle, and it is not unreasonable to infer that a strong sympathy of physiological action exists throughout life, by reason of identity of structure, notwithstanding that the cartilage early shrivels and severs its connection with the malleus. The innervation of the tympanum is identical with that of the oral cavity, in the main. The facial and auditory nerves in the internal auditory meatus communicate by two or more filaments, and the facial, by means of the vidian nerve, connects directly with the sphenopalatine ganglion. The chorda-tympani nerve serves as a bond of union with the lingual, and the petrosal minor with the otic ganglion. These ganglia being in close communication with the carotid plexus of the sympathetic, complete a circuit by which the cavities under consideration are virtually and physiologically one. The enamel organ and dental follicle develop from the same structure which contributes to the formation of mucous membrane that covers all these regions; also the chorda-tympani nerve. The importance of this anatomico-physiological condition is manifest, and indicates the necessity of correcting any coexisting disease, as carious teeth, naso-pharyngeal catarrh, or eruption of teeth, in order to secure a perfect cure, in sup-

puration of the tympanum. I have in several instances seen long standing suppurations get well, with no other treatment than cleanliness, after dental trouble has been remedied by a competent dentist.

Dr. Joseph Gibb presented a specimen of pulmonary anthracosis obtained from a male adult, who died from chronic Bright's disease. During life no evidences of pulmonary trouble were present. There were manifestations of incipient inflammatory disintegration at apex of one lung, discovered post-mortem. The deposit of coal dust was very marked, completely discoloring and disguising the pulmonary structure in areas.

Dr. Henry Rihl reported a case of immense scrotal hernia, which had existed for years. A truss had never been worn, the only support having been a suspensory. The history obtained from man and wife, and the professional opinions that had been given, led to the opinion that it was irreducible. Symptoms of strangulation, however, occurring, the doctor was called, and after producing complete anæsthesia with ether, a portion only of the protruding intestine was returned. Being unable to reduce the remainder he regarded it an instance of partially irreducible hernia, and left the patient. On calling the following day he was surprised to find that the whole mass had disappeared and the hernia was completely reduced. The character or nature of this hernia is a question to be answered. Was it a partially irreducible hernia, with slight adhesions, which were severed by the attempts at taxis? Dr. Montgomery replied that he did not consider it impossible to have been as the Doctor mentioned. Dr. Montgomery narrated instances of femoral hernia in females under his care, and especially one, that had been regarded by several physicians as irreducible. The protrusion was very large, almost that of an adult cranium. Anæsthesia and properly applied taxis resulted in reduction. In taxis it is essential to manipulate in such a manner that the soft or fluctuating mass is not forced over the ring as a cushion, a method frequently seen and as frequently unsuccessful. The mass must be moulded, as it were, wedge-shaped, when properly directed force will effect reduction. He mentioned a case where, in operation, the hernia was partially reduced, a small portion of intestine remaining constricted. Peritonitis developed, evidently, however, not from the constriction, resulting fatally. The constriction was detected post-mortem. In another case the hernia was composed almost totally of omentum. The small portion of intestine was greatly discolored. Omentum was removed and the suspicious intestine returned. Peritonitis and death resulted. Should another instance occur with intestine so gangrenous he would enlarge incision to abdominal cavity and excise the disintegrated intestine.

The doctor also narrated the following very interesting history: A professional gentleman from a distant State began to suffer, late in life, from attacks of severe megrim. The neuralgic headaches began to occur with greater frequency and severity. Neuralgic pains eventually developed, lasting several days, which were independent of the cephalalgia. After the existence of this trouble for nearly two years, paroxysms of vertigo and an inclination to fall toward the right occurred. During the cephalalgia the patient seemed auto-unconscious, and sat in an apparent stupor, but if an individual would enter his apartment, questions propounded were answered rationally. After the stupor passed off, which it did in from two to four days, the patient had no recollection of being interrogated, much less of replying. These paroxysms became more severe, frequent and prolonged, culminating in epileptoid spasms. This condition lasted four years. The physicians pronounced it fatty degeneration of heart, from the fact that the cardiac murmur and impulse at times were distant, very feeble, and at times irregular. Cerebral neoplasm was also diagnosticated, and even malaria. Inquiry elicited the fact that thirty years previously a chancre had been contracted, *but not followed by constitutional phenomena.* During the thirty years his habits were strictly temperate, with the exception of the use of tobacco, and his health remarkably good. The diagnosis was syphilitic affection of cerebral meninges, and the treatment adopted in accordance. The results are everything to be desired. Health is now excellent and the patient, apparently none the worse for his years of suffering, is engaged in the practice of his profession.

Editorial Department.

Periscope.

A New Test for Albumen in Urine.

Dr. Wm. Roberts thus writes, in the *Lancet:* When an albuminous urine is treated with a saturated solution of common salt, not the slightest reaction takes place; but if the brine be slightly acidulated with hydrochloric acid, the albumen is thrown down as a dense white cloud. This reaction constitutes a most delicate test for albumen in the urine. The best degree of acidulation for this purpose is obtained with about 5 per cent. of the dilute hydrochloric acid of the Pharmacopœia. A little more or a little less acid makes no appreciable difference in the sensitiveness of the test. Common salt dissolves in about two and a half times its weight of water at 60° F., and increase of temperature does not sensibly increase its solubility. The salt of commerce is always more or less dirty, and the solution requires filtration to fit it for use as a test. The salt solution should be fully saturated, otherwise the observer is apt to be led into error. In preparing the test with our common English measures the readiest plan is to mix a fluid ounce of dilute hydrochloric acid with a pint of water, and to saturate this with common salt, and filter. Dilute hydrochloric acid may be replaced by dilute sulphuric, dilute nitric, or dilute

phosphoric acid. All these acids are of the same saturating strength in the British Pharmacopœia, and all of them yield, with saturated salt solution, an equally sensitive reagent for albumen. Even acetic acid may be used, but the delicacy of the test in that case is not quite so great as when it is prepared with one of the mineral acids. The method of applying the brine test is similar to that followed with nitric acid. A portion of the suspected urine is placed in a test-tube, the test-tube is then held very much aslant, and the salt solution is allowed to trickle along the sides of the tube to the bottom, so that it may form a distinct layer below the urine. If albumen be present, a white, cloudy zone appears at the junction of the two fluids. Or the proceeding may be reversed. The salt solution may be first introduced into the test-tube, and then the urine added, with the same precautions as before, so as to obtain two distinct layers, one above the other, in the test-tube. It is important to be aware that the precipitation of albumen by acidulated brine is not due to a true coagulation. In this respect the brine test differs from nitric acid and boiling. In the two latter cases the albumen is transformed into the insoluble modification, which is known as "coagulated albumen." But when albumen is thrown down from urine by acidulated brine, the precipitate is not insoluble ; on the contrary, it is redissolved by free addition of water, or even by free addition of the albuminous urine itself. It is therefore essential to the efficient application of the test that the salt solution should be in excess at the point of expected reaction. This end is obviously secured in the above-described methods of testing. It may also be secured by adding to the suspected urine a volume of the salt solution at least equal to that of the urine in the test tube. If this point be not attended to the test is unreliable. For instance, if acidulated brine be added, drop by drop, to an albuminous urine, and the mixture shaken up after each addition, the first few drops either occasion no turbidity whatsoever or the turbidity produced disappears on shaking. But when by successive additions the quantity of brine approaches to or surpasses the volume of urine operated on, the turbidity remains permanent. In point of delicacy the salt test stands on a par with nitric acid. The minutest trace of albumen detectable in the urine by nitric acid is also detectable with equal ease by acidulated brine. In high-colored urines the brine test is distinctly superior. In this class of urines nitric acid produces a deepening of the tint, with, often, a disengagement of gas, which interferes with the sensitiveness of the reaction, but the brine test neither alters the tint nor causes disengagement of gas. On the other hand, I think that nitric acid gives a better idea of the quantity of albumen present by the density of the white cloud produced, than does the brine test. In addition to albumen, acidulated brine precipitates peptones, which are sometimes present in urine ; so that occasionally a slight cloudiness is produced by the salt solution where nitric acid and boiling (which do not precipitate peptones) produce no reaction. This distinction in the action of the brine test may hereafter lead to interesting information. In dense urines, highly charged with urates (but not containing albumen), the addition of nitric acid sometimes throws down the amorphous urates in the form of thick white clouds, and it is necessary to apply heat to distinguish with certainty the cloudiness so produced from cloudiness due to albumen. The salt test does not throw down the urates in this way. It is well known that the urines of patients who are taking large doses of resinous substances (such as the resin of copaiba), although free from albumen, yield a cloudiness with nitric acid in the cold, but if the urine be previously made hot, nitric acid produces no such reaction. This difference serves to distinguish cloudiness due to resin from cloudiness due to albumen. The brine test also produces a cloudiness in resinous urines, and the reaction occurs whether the urine be hot or cold. To avoid the fallacy thereby arising, all that is necessary is to add an excess of the urine which is being tested. If the cloudiness be due to albumen it disappears on such addition, but if it be due to resin, the cloudiness does not disappear on the addition of more urine. One of the chief advantages of the salt test is its incorrosive character. It does not stain nor burn holes in garments and carpets, nor fleck the hands with yellow spots. The use of it makes it possible to arrange a pocket-case for urine testing that shall not be a terror to the wearer. From this point of view the substitution of the salt solution for nitric acid will be a real boon to practitioners. * The salt test has this additional convenience, that it enables us to test successively for albumen and sugar on one and the same sample of urine. The suspected urine is first tested for albumen with the salt solution, and then Fehling's solution, or, still better, a pellet of the solid Fehling's test sent out by Cooper, is added, and heat applied. After boiling a few seconds the absence or presence of sugar is ascertained. The admixture of the brine in no way interferes with the copper reaction, in case sugar should exist in the urine.

* I have carried about with me for some months past a little pocket-case (which is only a stiff-backed cigar-case) which I have found a useful and safe clinical companion. It contains a book of litmus papers ; a narrow corked phial filled with acidulated brine ; a test tube charged with Coop r's pellets of the solid Fehling's test guarded with an india-rubber stopper; and, lastly, an empty test-tube. also provided with a cork. This compact arrangement furnishes the means of ascertaining the reaction of the urine, and of testing it in the most delicate manner for albumen and sugar. The empty test tube also serves to carry home a specimen of the urine for further and more minute examination. The "pellets" (made after a suggestion of Dr. Pavy) are sent out by W. T. Cooper, chemist, 26 Oxford street, London.

Interstitial Fœtation.

The following rare and instructive case has been recorded in the *British Medical Journal*, by Dr. Carr Holstok Roberts :—

On Sunday evening, October 1st, at 10.30, I was requested by the husband of one of my patients to come and see her, at once. He stated that they had gone to bed as usual, and had been asleep, when his wife awoke him, and said that she been waked by "pains in the stomach and couldn't get rid of them, nor go to sleep again."

He had given her some brandy, but without any good effect.

I found her in bed, a tall, stout woman, aged 32, complaining of pain in the abdomen, which was neither swollen nor tender on pressure. She was also suffering from sickness and slight diarrhœa, which she attributed to her having taken some strong pills. The vomit appeared to be semi-digested food, and the motions were such as would be produced by a purgative. The patient's skin was cool and moist, her pulse good, and her respiration and temperature both normal. She was perfectly conscious, calm, and collected, and there was nothing whatever to indicate such a sudden and fatal termination as took place. She informed me, on inquiry, that she had missed two periods. Her general health had always been good. Her two only children had both been born at the full period, and are both living. The younger, fourteen months old, had been weaned about two months. She had never had a miscarriage; but, thinking it most probable that such was the nature of this illness, I gave her opium, ammonia, and chloric ether, and ordered hot fomentations and linseed poultices to the abdomen, with a little brandy at intervals, leaving instructions that I was to be sent for, if necessary. I was not, however, called again until 8 A.M. the following morning, when she had suddenly become much worse. I then found her in a state of collapse, and evidently dying, but perfectly conscious, and complaining of a great desire to pass water. She had, however, done so during the night, and the bowels had been once relieved; the vomiting had not recurred. I passed a catheter, and found that the bladder was empty. She became rapidly worse, but remained perfectly conscious until 10.30, when she expired.

Necropsy.—There were no external marks of violence; the body was very fat, considering her age; the abdominal cavity was filled with very nearly six pounds of clot, and five pints of a bloody fluid. Floating in the fluid was a fœtus, at about the second month of development, enveloped in its membranes, and with the placenta attached. At the upper part of the uterus there was a rupture, close by the right Fallopian tube, large enough to contain three fingers, and looking like a sac, the walls of which were extremely thin. The true cavity of the uterus, which was laid open and examined by Mr. Doran, contained a decidua, as is often seen in cases of tubal gestation. There was no communication between it and the interior of the uterus, which weighed exactly eight ounces. The heart was fatty and somewhat flabby, and was perfectly empty, as were also all the large blood vessels. The other organs of the body appeared perfectly healthy. The head was not examined. The entire internal organs have been sent to the Museum of the Royal College of Surgeons, where no specimen of interstitial gestation was hitherto to be found, though there is a fine series illustrating tubal pregnancy. I have no remarks to make on the case, except as to the absence of the graver symptoms until within so short a time of the death. The blood had evidently continued oozing out, until there was no more to come. The apparent desire to pass water was evidently caused by the pressure of the clots, etc.

Pulmonio Surgery.

The *British Medical Journal* says that Dr. Koch, of Dorpat, communicates (*Deutsche Med. Wochenschr.*, 1882, No. 32) the results of two cases in Leyden's clinic, in which he had operated for chronic putrid bronchitis, with bronchiectasis. The first case was that of a man, aged 24, with the physical signs of contraction of the right lung, cavities in the right base, and catarrh of the right apex. The sputum indicated gangrene of the lung, and was unaffected by treatment. On June 26th part of the right sixth rib was resected, and after it had been ascertained that the two layers of pleura were completely united, the thermo-cautery was gradually pushed through the lung to the mediastinum. It opened a cavity of the size of a child's fist, about three fingers' breadth from the surface of the lung. The sputum expectorated sank at once from 400 to 120 cubic centimetres daily. On June 30th, part of the eighth rib was resected and the thermo-cautery passed through the base of the lung, without, however, entering any considerable cavity. Exploratory puncture with a syringe showed a purulent collection in front of the vertebræ, and on July 11th this was laid open, between the eighth and ninth ribs, below and internal to the angle of the scapula. The condition of the patient at the date of publication (August 5th) was most satisfactory, although the expectoration had not quite ceased; and it was proposed to explore still further the base of the lung.

The second case was that of a woman aged 29, brought into hospital with jaundice, and a putrid expectoration amounting daily to between 800 and 1000 cubic centimetres. After a preliminary aspiration of the right thoracic cavity on July 15th, four inches of the sixth rib was resected; and, a hollow needle having been passed through the anterior axillary line, in the direction of the right auricle of the heart, the thermo-cautery was pushed in the same direction. Two inches from the surface of the lung it entered a cavity, about the size of the closed fist; and, on pushing it upward and backward from this cavity, as guided by exploratory puncture, it entered another cavity, of the size of a child's head, and containing one thousand cubic centimetres of putrid fluid. The cavities were washed out with thymol solution, and three thick drainage-tubes inserted. The patient collapsed after the operation, but remain d alive for a week, during which time the expectoration was completely absent, and *post-mortem* the surfaces were found covered with healthy granulations. The cause of death was less the operation than a phlegmonous inflammation of the portal vein, a lobular broncho-pneumonia of the base of the left lung, from the presence of a foreign body, and a chronic septicæmia, which had existed for some time. The writer promises a further communication on the subject, in conjunction with Dr. Hiller, who is at present making extensive observations in Leyden's clinic. Meanwhile, he considers that operative interference is indicated in cases of single cavities, especially if near the surface, in cases of acute gangrene, and also in cases of foreign bodies not removable by the trachea, in putrid bron-

chitis, and in the rare cases of localized tuberculosis of the lung.

Disinfection by Heat.

The Medical Times and Gazette says:—

The superiority of heat over all fumigations and other reputed disinfectants is now generally recognized, and local sanitary authorities have already in many districts set up disinfecting ovens or chambers, of one or other kind. It is, however, of the utmost practical importance that the intensity and duration of the temperature required for the destruction of bacilli and of spores should be fully appreciated and attended to, if such "disinfection" is to be really effective, and not a dangerous delusion. Drs. R. Koch and Wolffhügel, after a long course of carefully conducted experiments, find that bacteria are not killed until after an exposure of one hour and a half to a temperature of 100° C. (212° F.). Spores of fungi require a greater heat, viz., 110° to 150° C. (230° to 300° F.), for at least as long, while nothing less than a temperature of 140° C. (285° F.), continued for three hours, suffices to kill the spores of bacilli, as those of anthrax. These are the germs with which we have to deal in practical disinfection. Such a temperature will, in three hours, infallibly kill these spores, but since it takes that time to penetrate to the centre of even small bundles of clothes or of pillows, a further exposure of like duration will be required for their complete disinfection, and few articles of clothing or bedding will bear such treatment without serious damage. It is to be regretted that Drs. Koch and Wolffhügel did not repeat their experiments with moist air, for there seems to be no reason to fear that the presence of a proportion of vapor not amounting to saturation can detract from, if indeed it do not actually enhance, the efficacy of the heat; while it is known that the most delicate fabrics, as ostrich feathers, dyed silks, etc., are uninjured by a temperature of 300° Fahr. under these conditions, and if the moist air be forced in under pressure, as in W. Lyon's apparatus, the penetration of the heat is greatly facilitated. The general conclusion to be drawn from these experiments, which are described in detail in the *Mittheilungen des k. Gesundheitsamte,* Bd. 1, seems to be that nothing less than a three hours' exposure to a temperature of little short of 300° Fahr., with precautions to insure the penetration of every part of the articles subjected to it, is sufficient. How this is to be attained is a question of detail, but at present it certainly appears that preference is to be given to the particular apparatus above named.

Employment of Prolonged Baths in Therapeutics.

In a recent editorial in the *Progrès Médical,* M. Leloir recommends the establishment in the Paris hospitals of apparatus for prolonged or continuous bathing, similar to those he has lately observed in Kaposi's service at the general hospital at Vienna. This consists of a mechanical bed plunged in a large wooden reservoir lined with zinc; water is continuously introduced at a proper temperature, and the patient eats and sleeps in his bath. M. Leloir observed patients who had remained continuously 50 or 100 days in the bath without leaving it, and who were by no means fatigued after their prolonged sojourn in the water; they spoke highly of the relief they obtained from their sufferings.

This system of bathing is not only very efficacious, as has long been known, in grave cutaneous affections, rebellious to all other forms of treatment (extensive inflamed psoriasis, pemphigus, etc.), modifying the morbid condition of the skin, calming irritation, and lowering the temperature; it has also recently proved of very great service in other than cutaneous affections.

The physicians in the Vienna hospitals have obtained very excellent results in the treatment of extensive burns and of localized gangrenous sores. Under the influence of a continuous sojourn in the bath the pain of extensive burns disappears, fever falls, the patients can rest, and cicatrization takes place with great rapidity.

But it is particularly in the treatment of gangrenous sores, such as the enormous ulcers left after prolonged decubitus in typhoid fever, hemiplegia, etc., that the results are most remarkable.

After 15 days the largest eschars become detached, the ulcer spreads no further, and soon presents a red, healthy surface, which cicatrizes with great rapidity. M. Leloir observed a case where the sacrum was denuded and the soft parts about it deeply ulcerated, enter in course of cicatrization twenty days after the commencement of treatment. Finally, no symptoms of hectic fever or of septicæmia are observed. These excellent results are explained by the influence of the prolonged bath itself, and also by the complete absence of pressure over the ulcerated parts, on account of the diminution of the weight of the body in the water.

Quinine and its Salts.

The following résumé in a recent number of the *Progrès Méd.*, of the physiological effects and therapeutic uses of the quinine salts may prove useful.

Principal Physiological Effects.—Quinine is an antiseptic, induces siallorrhœa by reflex action (bitterness), diminution of tactile sensibility; of acuteness of hearing, buzzing in the ears, hallucinations of hearing, vertigo, confusion of ideas, exaggerated beating of carotids, cephalalgia (quinic intoxication), titubation, apathy, general prostration, slight dilatation of pupils, nausea. After larger doses, vomiting, delirium, surdity, sometimes cecity or aphasia may ensue. Toxic doses may induce collapse, convulsions and death.

The other physiological effects are, augmentation in volume of the red globules (resulting from a greater quantity of oxygen), disappearance of the amœboid movements of the white globules, diminution in volume of the spleen.

In small doses (under a gram), acceleration of the cardiac contractions, then slowing-up and fall of blood pressure; finally, arrest of respiration followed by cardiac paralysis. The action on the temperature is insignificant in the healthy individual, and outside of the febrile conditions connected with malaria its action as an antipyretic is subject to much controversy.

The elimination is rapid, principally by the urine, which becomes more abundant; there is almost complete suppression of transpiration.

In rare cases a scarlatiniform eruption and hæmaturia have been observed after the administration of quinine.

The salts of quinine have latterly been employed hypodermically in Europe, but often produce local accidents, pains, persistent indurations, and often abscess. The chlorhydrate has proven the best salt for hypodermic use.

Use in Therapeutics.—In remittent or intermittent fever of malarial origin, neuralgia, intermittent fever, febrile manifestations symptomatic of hepatic abscess, empyema, etc., leucocythemia, insomnia, hay fever, albuminuria (Devonves), whooping-cough, septicæmia, gout, scrofulous keratitis, phlyctenular and pustular conjunctivitis, typhoid fever, acute articular rheumatism, etc., the drug can be administered hypodermically in urgent cases.

The Temperature in the Early Stage of Phthisis.

The *Medical Times and Gazette* says:—.

The treatment of phthisis is really efficacious only at its early stage, and it is then that the lesions do not furnish very evident physical signs, and consist chiefly in delicate modifications of the *timbre* of respiration, perceptible only to the practiced ear. Prof. Peter is of opinion that at this early period great aid is obtained in diagnosis by examining the local temperature of the thorax opposite the apex of the lung. The local temperature in early phthisis increases by nearly a degree; while in chlorosis, which is often confounded with phthisis, the temperature in this locality is below the mean. In the case of a young girl, upon which he recently lectured, there were present irregular menstruation, pallor, dyspepsia, palpitations, vertigo, etc.; and on a minute auscultation being made, there was also observed toward the apex of the lung some prolongation of expiration, and some of the roughness (*rudesse*) of inspiration, upon which Dr. Grancher lays great stress. The axillary temperature was 37.3° Cent., while that taken in the second intercostal space, where the prolongation of the expiratory sound was heard, was 36.8°, exceeding the normal of this locality, which is 35.8°, by a degree. In another girl presenting quite similar symptoms, but in whom the respiration was quite normal, the axillary temperature was 37.7°, while that of the thorax was below the normal, viz., 35.6°. In a third girl, with similar symptoms, the axillary temperature was 37.4°, and that of the thorax only 35.4°. To be conclusive, these cases would require further observation; but the coincidence of the indications furnished by auscultation and the thermometrical exploration seem to be of sufficient interest to be noted.

—At a recent meeting of the Board of Trustees of Jefferson Medical College, Doctors Joseph Hearn and Oscar H. Allis were elected members of the surgical staff of the hospital, to fill the vacancies caused by the resignations of Professors John H. Brinton and Samuel W. Gross.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The "Visiting List, or Physician's Diary for 1883," issued by William Wood & Co., New York city, has appeared, and is a well made and convenient pocket manual of the kind.

——The new drugs introduced of recent years are reviewed by Mr. B. F. Kilmer, in a report to the New Jersey Pharmaceutical Association, reprinted in pamphlet form. It is a carefully prepared paper.

——The diagnosis of brain tumors is often very obscure, and the paper by Dr. C. K. Mills, on that subject, reprinted from the *Archives of Medicine*, is timely and instructive. He cites the notes of twelve cases.

——Godey's Lady's Book for December appears with an unusually rich and attractive array of pretty illustrations, stories, and instructive matter for the ladies. All the recent fashions are depicted, and a great number of valuable hints for housekeeping and how to make home attractive, are added.

——The folly of Mr. Bergh's opposition to vaccination is well set forth in the reprint of a paper by Dr. C. M. Martin, of Greenville, Mich. It is a public misfortune for a man in many respects of sound intellect, like Mr. Bergh, to deal dogmatically with subjects about which his information is so scanty, and his logic so loose.

——In a duodecimo of 48 pages, by Dr. G. L. Austin (Lee & Shepard, Boston; cloth, 50 cts.), the author presents to non-professional people some easy methods of analyzing water, to the extent of deciding whether it is wholesome or noxious. His methods can be recommended as safe and reasonably accurate.

——The "Ephemeris of Materia Medica," published from time to time by the Squibbs, of Brooklyn, the sixth number of which is now before us, is an honest, scientific, well edited casual visitor. The last number has much to say about the oleates, and in passing gives our friend Dr. Shoemaker one or two raps. It is a subject well worth further investigation, both chemical and clinical.

——The Report of the Conjoint Session of the North Carolina Board of Health and Medical Society of North Carolina, held last May, makes

a pamphlet of 66 pages. It contains an essay on Preventive Medicine, by Dr. W. P. Beall, and the proceedings of the meeting. The Report of the Secretary contains some valuable suggestions on the prevention of river fever, a form of malarial disease common in that State.

——In a little pamphlet on the mechanical therapeutics of uterine diseases, Dr. James Guild, Jr., of Tuskaloosa, Ala., makes the very correct assertion—

"With a correct understanding of the normal anatomy of the pelvic organs, and a thorough appreciation of uterine pathology, and then to omit mechanical support as a remedial agent, appears to me incomprehensible. Certainly, if the mechanism of its action is understood, such a course is more the result of prejudice than of the inefficiency of such support itself."

He gives the particulars of a number of cases in support of his views.

——"Lippincott's Magazine" for December opens with a finely illustrated article on Block Island, by Charles Burr Todd. "Newburgh and its Centennial" is the title of a valuable historical paper, recounting the final events in the War of Independence. "The Earlier and Later Work of Mr. Howells" is written with discernment. "The Career of Felix Mendelssohn" is ably outlined by Edwin D. Mead. "A Day in Coyoteville," by Laura Wells Morse, gives an amusing sketch of western life and manners. Among the short articles in the "Monthly Gossip" is one by Amelia E. Barr, describing the childhood and early home of Adelaide Neilson.

——The etiology of consumption is the subject of a paper read before the Ohio State Medical Society, and appearing as a reprint, by Dr. D. N. Kinsman, of Columbus, Ohio. His views are tersely summed up in the following paragraph :—

"Thus have I endeavored to present the pathological features of these two forms of lung disease so often confounded. They have no features in common. From all I have learned concerning tubercle I believe it is the product of a specific inflammation. If the disease is specific there can be but one efficient cause, and we must abandon the theory that tuberculosis can have multiple efficient causes. Attendant circumstances may hasten or retard the development of tuberculosis but to conclude that they can do more, is illogical. Tubercle is inoculable and contagious. Tuberculosis does not, therefore, arise de-novo, but depends upon a germ, introduced from without."

He shows, moreover, that this distinction has often been maintained by practical clinicians.

BOOK NOTICES.

The Pharmacopœia of the United States of America. Sixth Decennial Revision. New York: Wm. Wood & Co., 1882. Cloth, 8vo, pp. 488.

This long expected and carefully revised work will be welcomed by the pharmaceutists of our country with great interest. In addition to the Pharmacopœia proper, it contains an historical introduction, notices on percolation, temperature, weights and measures, a list of reagents, tables of elementary substances, thermometric equivalents, specific gravity, solubility, saturation, etc., and separate tests of articles added and dismissed from the Pharmacopœia. The index is very complete, and the committee have throughout paid conscientious attention to distinctness of statement and accuracy in proof reading.

The lists of articles added and dismissed from the Pharmacopœia are often calculated to surprise one, in reading them over. So many are dropped which were once famous as remedies and still hold their own in the opinion of a respectable minority, so many are introduced with whose remedial properties the profession is but slightly acquainted! We know, however, that this selection and rejection were both the result of long and open discussion.

A Treatise on Therapeutics, Comprising Materia Medica and Toxicology; with Especial Reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, Jr., M.D. Fourth edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co., 1882. One vol., 8vo, pp. 736. Price, cloth, $6.00.

There is no better work than this for the study of the medical properties of drugs as based upon their physiological action. The present edition introduces all the results of the experiments in this direction which have been reported either in this country or Europe. The industry of the author is manifest on every page, and those who give their adhesion to his general theory of the method of investigating remedial agents by noting their action on the human body and the lower animals in a state of health, will find in his pages a thorough synopsis of what has been done in this branch up to the present.

The work is clearly printed, and has several excellent indexes, which add much to the convenience of using it.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D.,
JOSEPH F. EDWARDS, M.D., } EDITORS.

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THE QUARTERLY COMPENDIUM

OF

MEDICAL SCIENCE.

After Jan. 1st, 1883, the COMPENDIUM OF MEDICAL SCIENCE, formerly published half yearly, will be commenced as a *quarterly*, to be issued on the 1st of January, April, July, and October.

It is especially adapted to be taken with the REPORTER, as few or none of the articles in it appear in our weekly journal.

The price of subscription remains the same, $2.50 per year. But as a special inducement to subscribers to the REPORTER to take the COMPENDIUM also, we offer the two journals at the very low price of

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when paid for strictly in advance and directly to this office.

THE SCIENTIFIC POSITION OF MEDICINE.

It is a constant surprise to the physician to discover the opinions about doctors and medicines and remedial theories which prevail among the public. We do not now speak of the ignorant masses who have had no training in the exact sciences, and may be said not to know how to think on any subject, but of reasonably well educated men and women.

This ignorance shows itself in a variety of ways. It is at the foundation of the success of the out-and-out charlatan, who trades upon it with effrontery, and considers it the chief element of his stock-in-trade. Though often extremely and palpably ignorant, not able to write a sentence correctly, yet his brazen assertions are taken as truth, and he is paid to exercise a knowledge which all know can only be obtained by years of arduous study.

Reckless hypotheses are dignified by the name of "systems" or "schools," and are asserted, by people of excellent general intelligence, to be reasonable and scientific. One such "school" will use nothing in the shape of a remedy but vegetable productions; another discards every drug or article of food derived from the animal kingdom; a third will reduce its doses to a quantity so small that they become even mathematically unappreciable. Yet all these "systems" find honest adherents and defenders.

The number of believers in miraculous cures, in restoration to health by prayer, or vows, or pilgrimages, or amulets, is by no means small. Doubtless these methods are at times efficacious through indirect agencies. But it is a sad commentary, both on the religion and the science of the age, that such occurrences are heralded and accepted as direct results, in what are called intelligent circles.

There is, in fact, a disposition to look on really scientific physicians with distrust. They are accused of jealousy when they endeavor to point out the logical inconsistency of the pseudo-scientists of the day; they are charged with an effort to conceal knowledge when they frankly state the difficulties in laying a medical question before a non-medical audience; their knowledge

is belittled or denied because it is impossible to give it a concrete and uniformly applicable formula.

The legitimate and natural differences of opinion on medical points, arising from the inherent complexity of the problems and the infinite variations of cases, are used to make it appear that both the methods and the results of medicine are worthless.

All these popular errors arise from a deficient mental training, and a lack of comprehension of the nature and limitations of medical studies. We may expect them to disappear as general education is raised. An appreciation of the logical methods used in medicine will grow gradually, and the knavery and absurdity which have long clung to practice will be shaken off as parasites.

Clear views in the profession itself will greatly aid to this end. Skepticism or credulity is each often carried too far by physicians. The fortunate medium between routinism and novelty-seeking must be sedulously sought for, and a proper appreciation of the true position of medicine in the category of the sciences must be impressed early on students.

RIVER POLLUTION AND THE DISPOSITION OF SEWAGE.

The *Westminster Review*, in a recent issue, contains a valuable and practical article on this very important subject, from the pen of Mr. URQUHART A. FORBES.

It is a question of vital importance, and one well worthy the serious consideration of sanitarians.

The old method of draining into wells, in time became a nuisance. The difficulty of emptying them, the dangers to health that ensued from this procedure, the saturation of the soil under habitations with human refuse, all assumed such formidably objectionable features that we began to look around for some more perfect means of carrying off our sewage.

The rivers suggested themselves as natural drains, and cities located on river banks were considered blessed indeed, and into their capacious flow our waste of all kinds was made to empty, and we were satisfied that we had at last solved the problem of disposal of sewage.

But was this change a wise one? Experience would seem to answer in the negative. According to Mr. FORBES, the rivers of England have now become so polluted as to constitute a danger to the public health. That this can occur, no one can for a moment doubt. Even though a city may be drained into a river from which the water supply of said city is not derived, yet, in time, and especially if this river be subject to tidal influences, its water will become so saturated with sewage that it will constitute a large uncovered cess-pool, from the surface of which the sun's rays will absorb poisonous vapors, to be wafted over the city whenever the direction of the wind is favorable.

The fish that may be supplied to the city from such a river cannot be wholesome food.

Since, then, drainage into rivers is so dangerous, how are we to properly dispose of our refuse.

The key-note of the explanation is to be found in the pregnant sentence made use of by the priests of the Catholic church, when, on Ash-Wednesday, they place upon the forehead a small pinch of ashes, "Remember, man, that thou art dust, and unto dust thou shalt return."

The proper disposition of all the products of the gradual death of man, as well as of his body in mass after the final death, is to return it to the earth from whence it came, that it may there undergo such changes as to make it once more fit to constitute an integral portion of the human being.

By sending it out into the rivers, and possibly into the oceans, we are gradually but surely robbing our land of its necessary nutriment.

If we constantly draw on, and never deposit in, a bank, it will soon be compelled to suspend payments; so will it be with our land if it receives similar treatment. That which is injurious to animal life, human refuse, is the very pabulum intended by nature for vegetable life.

But how to accomplish this? A suction system of drainage (very excellent in theory), by which

sewage is carried off some twenty-five or thirty miles from the city, is now being experimented with in a certain section of Paris. The principle on which its theory rests is the true one, the forcible drawing of all refuse far away from crowded habitations and returning it to the soil.

Some sanitarians advocate the cremating or burning of all refuse; we can see no objection to this, provided it does not destroy its value as a fertilizer, but we fear it would impose an unnecessary extra expense in the necessary subsequent removal of the ashes.

To accomplish such a reform the people must realize its importance.

To criticise a man because he does not subscribe to your belief, seems very much like dogmatism, yet, in the matter of sanitation, any man who understands anything about it, and does not give it his hearty and active coöperation, can only be characterized as exceedingly thoughtless, to say the least.

Of all natural sciences, hygiene (sanitation), to-day, though only in its infancy, has the greatest amount of *certainty* to offer in its teachings. It can tell you, with a wonderful degree of accuracy, that if you will strictly follow its directions concerning the exclusion of sewer gas from your vicinity, and will avoid the emanations from the alvine discharges of one suffering from the disease (which really means the same thing), you *cannot* have typhoid fever; unfortunately, when you have once contracted the disease, no physician can truthfully say to you, if you do as I say, you *cannot* die of typhoid fever.

This one illustration, the moral of which can be found in the instances of all the contagious diseases, argues much for the certainty with which hygiene can promise us immunity from disease; and since it is yet in its infancy, it behooves all to encourage and foster its growth, that it may *soon* become, as it ultimately *must*, the most practically valuable of all the sciences.

—The Attorney General of the United States is of opinion that a vacancy in the office of Assistant Surgeon General can be filled by the appointment of any surgeon with the rank of Colonel.

Notes and Comments.

The Reporter in 1883.

We intend, in the year 1883, to introduce several new features into the Reporter, which will make it of increased value to readers.

Special attention will be paid to giving a series of Hospital and Clinical reports, and in the matter of news and Medical Society reports we shall arrange to have as complete and early information as any journal published.

We ask our old friends to continue with us, and beg them to bring the Reporter to the notice of their medical brethren, who do not already subscribe to it. As an inducement to this, we make our present subscribers, we mean those who have already paid for the year 1882, the following offer:—

If they will send us their subscriptions for the Reporter for 1883 and 1884, they may have the two years for $8.00.

If they will send one subscription and one new subscriber for 1883, they may have both subscriptions for $7.50.

Paris Health Report.

M. Besnier's report for the last quarter of 1881 presents many facts of interest. The early part of winter was milder than usual, but the hospital mortality was high, 3784 deaths, instead of 3075 for the corresponding period of 1879, and 709 higher than the average for the nine years preceding.

1st. Affections of the Respiratory Organs. The influence of the winter season was distinct; the mortality in pneumonia was as high as 27 to 35 per cent.

2d. Diphtheria. The prevalence of this disease was most marked in one section of the city (11th Arrondissement). The number of deaths increased from 462 for the same trimester in 1880 to 605. During the past ten years, while typhoid fever caused 13,004 deaths, and the eruptive fevers 14,100, diphtheria alone swept off 16,629 victims. During the quarter M. Archambault reports 8 cases, and M. Labric 10 cases where diphtheria was contracted at the Children's Hospital, by patients who had been admitted for other diseases. Thus in two services alone 18 victims of contagion which might be prevented.

3d. Eruptive fevers. There has been a gradual decrease in the number of cases, and instead of 356 deaths in the first quarter, there has been but 117 in the last. The number of cases of smallpox was much lower, and the mortality less marked. At the Children's hospital, out of

42 cases of measles there was 18 deaths, a terrible proportion, due to the prevalence of diphtheria in the wards. M. Besnier calls attention to the increasing prevalence of scarlet fever at Paris. From 1871 to 1880 there occurred but 951 deaths from this disease, three times less than the anuual mortality at London from the same malady. But in 1880 the death rate advances from 95 (1879) to 356, and this increases in 1881, when the mortality was 452; the malignant and complicated forms have been more common.

4th. Typhoid Fever. During 1881, typhoid fever held to the excessive proportions it had assumed in 1881. The disease was more frequent and of more gravity among the male population. During the quarter there were 988 cases observed in the hospitals, with 212 deaths, a mortality of 21 per cent.

In M. Labric's service at the Children's Hospital there were 18 cases with 4 deaths, three of them due to diphtheria contracted in the wards.

The Value of Antiseptics.

In the course of the Presidential address at the meeting of the Yorkshire branch of the British Medical Association, (*Brit. Med. Jour.*) Dr. T. R. Jessop said:—

As an instance of the extent to which, with antiseptic precautions, we may pursue a cancerous infiltration, I may mention the case of a hospital patient from whom I had previously removed the scirrhous mamma, and who had now returned with such a fullness between the clavicle and the deeply indented scar as to lead me to explore for secondary disease. On opening up the axillary and sub-pectoral spaces, I found them to be literally filled with adherent and infiltrating masses of growth, as is frequently the case, out of all proportion to the pre-existing signs. For their extirpation prolonged tearing and dissection were needed, during the course of which, first of all, the pleural cavity was distinctly laid open, and subsequently the axillary artery, which had been imbedded, and, perhaps, displaced, was completely torn across, and yet, with all this, the woman was able to leave the hospital within three weeks, her wound soundly healed, and herself none the worse, apparently, for the dangers through which she had passed. And again, as illustrating the advantages to be gained by perseverance in the removal of recurrent growths, I may select the case of a lady—a patient under the joint care of Mr. Halliday, of this town, and myself—who, after having during twelve consecutive months undergone no fewer than six separate operations (including the original amputation of the breast), for the removal of cancerous nodules affecting the cicatrix, the surrounding skin and subjacent tissues and the axillary lymphatics, passed upwards of two years of usefulness, in the enjoyment of good health, now again exerting herself beyond the average of women; and then died, without any sign of outward disease, from an acute thoracic affection of short duration.

Cholera-like Symptoms in Uræmia.

Dr. H. Mallins reports, in the *Lancet*, a peculiar case that came under his care some time since, in India. A man was brought into the hospital at noon, in a state of complete unconsciousness, with severe purging and vomiting, the stools being of the rice-water character. He had been working up to nine o'clock, and while cutting grass in the sun, first felt ill. His features were pinched, surface quite cold, tongue dry, with slight brown fur. By the next morning he was conscious and able to get out of bed. Pulse 118, very weak. Respirations 32. Temperature 99.2°. Suppression of urine existed, the bladder being found empty on several explorations. Diarrhœa continued, he grew drowsy, and died two days after admission.

At the time of the occurrence of this case an outbreak of cholera was not unlikely, as cases had been reported from some stations close by. The sudden occurrence of the symptoms of unconsciousness, coldness of surface, feebleness of voice, vomiting, purging, the stools being of the rice-water character, and finally the suppression of urine, might have justified the diagnosis of malignant cholera, and in the absence of an autopsy the case would most probably have been reported as such. The examination, however, revealed a hopelessly disorganized pair of kidneys, and justified the conclusion that all the symptoms were due to uræmia. It will, therefore, be well to bear in mind the possibility of cholera-like symptoms being due to the diseased kidneys. It may be added that, contrary to expectation, no outbreak of cholera took place at the station where the subject of these notes died.

Bromo-Menorrhœa.

In the *Medical Times and Gazette*, Dr. Alfred Wiltshire applies this term to offensive catamenia. If due to chlorosis he uses iron. Pledgets of cotton wool soaked in boro-glyceride are very efficacious. In middle-aged women the offensive odor may presage commencing malignant disease. Always look for a cause, either local or constitutional.

The Rational Treatmsnt of Catarrh.

Dr. S. Baruch read a paper on this much discussed subject, before the last meeting of the South Carolina Med. Ass. (*Transactions*), which contains many valuable practical hints. He insists that every diseased part must be seen by the eye of the attendant before medication, and again examined, to ascertain if the remedies have been applied to its entire surface. The anterior nares and a small portion of the posterior surfaces can be best reached by the atomizer; the posterior nares and vault of the pharynx by the post-nasal syringe. He uses a formula consisting of one grain of carbolic acid, two grains each of bicarbonate and biborate of soda, half an ounce of glycerine, and one ounce of water, for cleansing the parts thoroughly before applying the curative medication. *Not until every diseased and healthy part presents itself clearly*, should medication be thought of. He then recommends finely powdered arrowroot as a vehicle, and nitrate of silver, zinc sulphate, tannin, alum and bismuth as the medicinal agents. By dusting the parts well, the powder mixes with the mucus and forms a firmly adhering plasma, which slowly dissolves in the secretions, thus permitting a thorough action on the subjacent tissue. By attention to the thorough cleansing of the parts, many obstinate cases of catarrh can be made to yield to medication.

Many cases of catarrh are maintained by the habit of nose cleaning now so much in vogue. Patients should be made to learn that the delicate lining of the nasal cavities will not brook this frequent scouring without resenting it.

A Remarkable Case of Brain Lesion.

The *Revue de Méd.*, 1882, No. 5, reports the following case, which came under the attendance of Dr. Girandeau. It is one of those cases of brain lesion which would seem to prove the correctness of Brown-Sequard's views, being almost in direct contradiction to the generally adopted physiology of the brain. In a patient of middle age, motion, speech and reading were normally performed, and evinced no morbid condition. The individual simply complained of general malaise, and died of debility. The post-mortem examination gave the following result. We will mention, however, that the patient occasionally suffered from moderate headache, and that all subjective signs, as choked disk, etc., were absent.

A glio-sarcoma of the size of a walnut was found in the brain, spreading from the Sylvian fossa through the first and second third of the second temporal convolution, forward from the point of the temporal lobe three ctm., backward 1 ctm. from the lower end of the fossa Sylvii. The gyri were not pressed out of place, but were changed, up to deep into the white substance, into a rose-colored mass with hemorrhagic foci.

Here was a lesion which, from its locality, should have caused the symptoms and signs above mentioned. The case goes to show that we still do not know enough of compensatory action of the great nervous centres.

A New Sign of Pregnancy.

The *American Journal of Obstetrics* says that Jorisenne (*Arch. de Tocologie*) has furnished a sign by which we can diagnose pregnancy during the first two months. Starting with the assumption that in pregnancy there is a hypertrophy of the heart (and this assumption, if erroneous, will not affect Jorisenne's results), he has found that, while in health there is a variation of from ten to twenty beats in the radial pulsation, according as the body is upright or horizontal, in pregnancy, no matter what the position, the beats number the same. Jorisenne has been able to diagnosticate pregnancy as early as the first month, when no other sign except the missing of a menstrual period was present. When examining a patient for this sign, it is necessary to proceed with deliberation, first counting the radial for the space of fifteen seconds while the patient is standing, then sitting, then reclining. The order may then be reversed, and uniformly the same number of beats will be recorded. Jorisen promises an explanation of this phenomenon in a future paper.

Apomorphia as an Emetic.

Dr. W. Geddes Stark reports two cases in the *Canada Lancet*, one of a man who had swallowed false teeth, which were sticking in the œsophagus, the other of a woman who was becoming rapidly comatose from morphia poisoning. In each case he injected hypodermically $\frac{1}{8}$ gr. apomorphia. In the one case it provoked free emesis in six and in the other in eight minutes.

Pediculi Capitis.

In the *Brit. Med. Jour.* Dr. W. J. Beatty says that two grains of perchloride of mercury dissolved in an ounce of dilute acetic acid, well rubbed into the parts, night and morning, will effectually destroy the pediculi, and the nits formed on the hairs. The clothing should be disinfected by exposure to a temperature of at least 200° F.

Bright's Disease Treated by Pilocarpine.

Dr. S. G. Webber reports a case in the Boston *Medical and Surgical Journal.* The man's urine contained albumen, hyaline, granular, epithelial and fatty casts, blood and pus, triple phosphates and amorphous phosphates. Face and legs œdematous. Nitrate of pilocarpine, in doses of one-third of a grain, was given once or twice daily, sufficiently often to keep up free diaphoresis. He died about three weeks after admission to the hospital, when the kidneys were found to have undergone amyloid degeneration.

This case is interesting, as showing the efficacy of pilocarpine to produce its peculiar effect in exciting the sweat glands during many days of continuous use. Also its value in checking the convulsions, in preventing their return, and in prolonging the patient's life. A large amount of urea was excreted through the skin, and so much water escaped thus that the œdema disappeared. Another point of interest is that, although the urine increased to seventy-six ounces, the convulsions recurred just then.

Transplantation of Muscle in Human Beings.

Before the Imperial German Congress of Surgery, Herr Helfrich read a paper on this subject (*Medical Press and Circular*), based on a case in which the whole of the biceps of a woman had been removed, with the exception of a strip the thickness of a lead pencil, and replaced by a piece of muscle from a dog. Complete healing took place, and after some months' use of electricity, the power of movement, lost previously to the operation, was restored. Herr Gluck (Berlin) reported that his experiments in the transplantation of muscle had always given positive results.

A New Reaction for Albumen.

In the *Zeitsch. f. Analyt. Chem.*, xxi, p. 301, Dr. A. Raabe mentions the following new reaction for albumen. To the well filtered urine contained in a narrow reaction tube, a small piece of crystallized trichlor-acetic acid is added. This is gradually dissolved on the bottom of the tube, and there, where the two fluids come in contact with each other, when albumen is present, a turbid zone, clearly visible and sharply confined. Normal urine, according to R., gives no similar reaction, only if urates are present in very large quantity, a weakly turbid condition follows, but this is not confined as mentioned, but spreads all over the fluid. Further, if the urine is heated, this turbidity, due to urates, disappears immediately, while such is not the case with the turbid ring caused by reaction of trichlor-acetic acid on albumen in the urine. R. considers the latter reaction as far more sensitive and reliable than the one with nitric, or even with metaphosphoric acid. In doubtful cases, especially, it would be of great service.

Treatment of Scurvy.

A correspondent writes to the *Brit. Med. Jour.* reporting the following case:—

A young man with spinal disease had all the signs of sea-scurvy, spongy gums, etc. I ascertained that vegetables had been repugnant to him, and for a long period he had refrained from taking any. The use of vegetables and turpentine, with potash, both cheap remedies, wrought a speedy cure. I beg leave to suggest these drugs upon an extensive scale, as on shipboard. I believe alkalies more effective when not given, for internal or external use, in a state of chemical combination likely to neutralize the effect, *e. g.*, the citrates internally, or sulphur with lime externally, in the treatment of scabies. I prefer free sulphur, and it is the most reliable.

Discoloration of Skin in Diabetic Patients.

In two cases of diabetes, where the patients were not only very emaciated, but where the skin had assumed the well-known brownish discoloration, Dr. V. Hanot (*Revue de Méd.*, 1882, p. 385) found at the post-mortem examination hypertrophic cirrhosis of the liver, with pigmentation to a high degree of the liver cells, and also strong pigment masses in the interstitial spaces.

So far, this peculiar discoloration of the skin in diabetic persons had been unexplained, and therefore the above observation is rather of decided importance.

Perforation of the Ileum by Worms.

Dr. T. J. Crofford reported, at the last meeting of the Mississippi State Medical Society, the case of a boy (colored), aged eight, who complained of pain in the right iliac region, had fever for eight days and died, having passed several round worms three days before death. At the autopsy the ileum showed two perforations, one twelve, the other twenty-four inches above the ileo-cæcal valve, and the peritoneal cavity contained half a pint of pus and two lumbricoid worms, each ten inches long. One of the worms was between the liver and diaphragm, partially decomposed. The edges of the perforations in the bowel were covered with lymph.

Correspondence.

Ante-partum Hour-Glass Contractions, Complicated with Hydrocephalus.

Ed. Med. and Surg. Reporter :—

On Sept. 3d I was called to attend Mrs. W. S., thirty years old, five feet high, weight 115 pounds, in her fifth confinement. I had attended her in her last two confinements. Nothing unusual. Her health tolerably good. She had been in labor about twelve hours when I arrived at the house, at six o'clock P. M. Applying my hand to the abdomen, to determine the probable presentation, I was astonished to find the upper segment of the uterus contracted as hard as a stone, the lower segment apparently normal and but slightly contracted during pain.

Upon making an examination per vaginam I found the os more than half dilated, the membranes completely filling the opening, and the os soft and dilatable. By the most critical examination, I could find no part of the child presenting. After waiting about two hours and finding no progress had been made, I ruptured the membranes and discharged an immense quantity of water.

In a short time I found the left shoulder presenting at the right of the middle of the sacrum ; the right shoulder, above the right acetabulum ; the head turned back, with the occiput lying on the upper dorsal vertebra ; the neck, of course, broken. Believing I had an extraordinary and difficult case, I sent for assistance and chloroform. When my assistant (Dr. Freeman) arrived, I put the patient under the influence of chloroform, and proceeded to perform version.

Passing my right hand into the uterus, it came in contact with an enormous head, filling its lower segment. With difficulty I passed my hand around the head, as high as the umbilicus, when I came in contact with an hour-glass contraction, about one inch above the middle of the uterus. It resembled, to the touch, a hard rubber ring, about one and a half to one and three-fourths of an inch in diameter ; its internal surface as smooth as glass and about one-half an inch thick. With difficulty, and after thirty minutes' time, I succeeded in passing my hand through the ring, as far as a little above the knuckles. I was then, from pain and exhaustion of my hand, compelled to wait some time, to recover from its half paralyzed condition.

I then slowly closed it, to dilate the ring, which gradually yielded to the pressure, and, extending my fingers, I passed them over the nates (the fundus remaining in the same rocky condition), and along the left thigh, until I reached the popliteal space. Then flexing the thigh upon the abdomen, I commenced direct traction. During this part of the operation I suffered most severely from the pain and exhaustion of my arm and hand.

By persistent traction I gradually brought the legs through the ring, and in time, the breast. As the breast emerged from the ring, the whole body of the uterus contracted uniformly, and assisted me greatly in bringing down the body of the child. Suffice it to say I succeeded in delivering the body and arms. I then attempted to bring the head into the pelvic cavity, and, applying too much force, ruptured the muscles and tissues of the neck above the right clavicle, thus disclosing the cervical vertebræ, examining which I found the fifth vertebræ separated from the fourth from an inch to an inch and a half, and a portion of the cord, thin and shriveled, protruding from the fourth.

It occurred to me that I could utilize the accident by forcing the water from the head through the spinal canal. The head could now be distinctly outlined (in the absence of pain), reaching to the umbilicus.

Upon making firm pressure on the head, through the abdominal walls, I was much gratified to see the water rapidly issuing from the wound in the neck, until all but about four ounces was discharged.

By traction upon the remaining tissues of the neck, and with the aid of the blunt hook placed over the ramus of the jaw, by my assistant, I succeeded in delivering the head in about twenty minutes. There was neither hemorrhage nor laceration of the soft parts. Placenta came away in three minutes. Patient made a good recovery, and is now attending to her usual household duties.

Time of operation, one hour and forty minutes.

F. A. Shugert, M.D.

Tideoute, Pa.

Malaria in Skin Diseases—a Correction.

Ed. Med. and Surg. Reporter:—

Some time since the following paragraph appeared in the *Michigan Medical News*, and has been widely copied in the medical journals of the country :—

"A century ago John Hunter divided all skin diseases into three classes, one of which is cured by mercury and the iodides, a second by sulphur, and a third class which the devil himself can't cure. Dr. L. P. Yandell, who quotes Hunter as above, is given credit for a much less complex classification than even this. He attributes all skin eruptions to malaria. Quinine is a specific for malaria; ergo, quinine is the remedy for all skin eruptions. Q. E. D."

I trust that my confréres of the press will do me the kindness and the justice to publish the correction now given, as the matter is not only one of personal interest to the writer, but is of scientific interest to the profession. The subjoined extracts are from a supplement to a report read to the American Dermatological Association, September, 1877. A copy of this report will be gladly sent to any one desiring it :—

"From the criticisms which have been made on my views, I find that I have not succeeded in making myself perfectly understood. What I have contended for, and what I have reiterated, is simply this: Malaria is *the chief source* of *acute* skin disease. Scrofula is *the chief source* of *chronic* skin disease. The more inveterate cases of skin disease are often due to the coexistence of these two things. The specific exanthems, of course, are not included here, but I contend that their progress and termination are often largely influenced by the presence of mala-

ria, or struma. *I do not claim* that malaria and struma are the *sole* causes of the dermatoses. Indeed, *many* of the dermatoses may exist *independently* of *malaria* or *struma*, and most frequently some exciting cause is necessary to develop the cutaneous eruption. Among the exciting causes are irritants, injuries, insufficient or improper ingesta, vicissitudes of temperature, alcohol, dentition, menstruation, parturition, lactation, etc. The proofs of the truth of my views are, in the first place, that the diseases of the skin are cured more certainly and more quickly by the anti-malarial remedies on the one hand, and by the anti-strumous on the other, than can be done by any other line of therapeutics; and in the second place, that careful and painstaking investigation will, in the majority of dermatoses, make apparent the existence of the malaria or the struma, as the case may be.

"In conclusion, I desire to impress upon the reader that my views are not confined to the skin diseases. What produces disease here will produce it in all other organs of the body. What is true of dermatology is equally true of gynecology, and ophthalmology, and otology, and it is just as true of the diseases of all the other regions of the body."

Subsequent observation has confirmed my belief in the correctness of these views.

LUNSFORD P. YANDELL, M.D.

Conjugal Onanism.

ED. MED. AND SURG. REPORTER.

Soon after the publication of "Goodell's Lessons on Gynæcology" I purchased a copy of the book, and have frequently referred to it in my practice, with great benefit to myself and patients.

I have often read with close attention the last chapter in the book, on "The Sexual Relations as Causes of Uterine Disorders." I have, again, just finished the perusal of this chapter. I entirely dissent from the author's theological opinions therein set forth. It is hardly an open question whether those views are in place in such a work, and I have never been able to refer any of the evils which he so eloquently portrays to the cause to which he ascribes them. I am inclined to think that his theology has obscured his otherwise remarkably clear and practical mind. However this may be, and no matter whether he or I am right or wrong, the subject presented in the chapter referred to is of sufficient importance to entitle it to a thorough examination in the columns of the REPORTER, if not from a theological, at least from a medical standpoint.

The question, then, which I would like to have discussed in the REPORTER is: Is the moral and physical degradation resulting from these vicious sexual relations (viz. conjugal onanism and other preventive measures) so damaging as Professor Goodell represents them to be, or is it not. There is little if any occasion to doubt that these preventive measures are very extensively practiced at the present day, throughout this and all other *bible reading* countries.

It becomes, then, the duty of all physicians to inquire carefully into the damaging charges laid to these practices. No "squeamishness" should close our lips, and no theological bias should blind our eyes or prejudice our minds, in investigating this subject. If I shall succeed in arousing a spirit of investigation in regard to this very important question among the profession, my object in writing the above will have been attained.

H. NYE, M.D.

Enon Valley, Pa., Nov. 20th, 1882.

NEWS AND MISCELLANY.

Dr. Oliver Wendell Holmes' Farewell.

On Tuesday afternoon, Nov. 28, Dr. Oliver Wendell Holmes took formal leave of the Chair of Anatomy in the Harvard Medical School, which position he has held for thirty-five years. After the applause which greeted his entrance to the lecture room had subsided, the Professor said there were three times in a man's life when he might consider himself the centre of attraction, at his christening, at his marriage, and at his own funeral. This, the beginning of his thirty-sixth course of lectures on anatomy, was the end of his connection with the school. For about half of this time he had also taught physiology, but with the growth of the science he had gladly given it over to form a new department. It was a good thing for a college to get rid of her old men. Their ideas were antiquated, and the college had better let them go. He had held his office so long because he taught a subject which could never become antiquated. In his lifetime it had received very important additions. He had begun the study of law in his youth, as an experiment, but for various reasons had turned his attention to medicine. While in the Law School he had engaged with some friends in publishing a paper, and for the first time saw himself in print. From the printers' type he had contracted the disease of authors, lead poisoning, which he had never quite got rid of. The Doctor finished with some practical remarks on the way in which the science was tending.

Dr. Holmes is to be made Professor Emeritus of the school. The Doctor, it is understood, resigned the professorship not because of ill-health or old age, but because he wishes to devote more time to the field of literature.

National Board of Health Report.

The National Board of Health has filed its report for the fiscal year 1882. One of the sections of the law of 1879 imposes penalties on ships which enter a port of the United States from an infected foreign port, but the Board has found this part of the law inoperative, inasmuch as one of its clauses requires the promulgation of the law in the foreign ports, and the authorities of Cuba would not permit this promulgation to be made. It is, therefore, strongly urged in the report that this law be so amended as to require bills of health from all vessels coming to the United States, without imposing upon this Government the burden of proving their ports of departure to have been infected, and also that the penalties provided for the violation of the

law should apply without the proviso of a previous official promulgation in the said ports. We cannot too strongly second this recommendation. The health and lives of the people must be paramount to every other consideration, and when it has been demonstrated that a place like Cuba (from which much of our yellow fever comes) can, by obstinacy, interfere with our sanitary arrangements, then we should so legislate as to take from her or any other country this obnoxious and dangerous power. The report, after showing that all the work undertaken and carried on successfully by the Board was clearly within the limits of its discretion under the law, and was accomplished with due regard to economy, closes with estimates for the continuance of its work, amounting to $150,000, with an epidemic contingent fund of $100,000.

A Worthy Example.

A beautiful memorial of his daughter, who died last summer, has been made by Senator Edmunds, by endowing in her name a room in the Mary Fletcher Hospital, Burlington, Vermont. Over the door, outside, a handsome tablet bears the name, "Julia M. Edmunds," and the date of the endowment. Within, the room is luxuriously furnished, every article in it being marked with the initials "J. M. E." On the wall hangs a superb engraving of Millet's painting, *L'Angelus*. The endowment, $5000, provides for the support and care of one free patient, and its first beneficiary has just been received.

Practical charity is not so common in this country but that so beautiful an example of it should be given extensive notoriety. No one could erect a more lasting or pleasing monument to the memory of a dear departed one than by following this worthy example. Our hospitals are none too rich, and such munificence would enable them to dispense even more charity than they do at present.

Cremation in France.

A bill has been distributed in the Chamber of Deputies containing, among other signatures, those of M. Gambetta and M. Paul Bert, giving all persons the right to leave testamentary instructions as to whether their bodies shall be buried or cremated.

This seems like a very fair way of legislation; to allow a man to do what he pleases with his own body. While cremation possesses many advantages over the ordinary mode of burial, yet we have always felt that it interfered to a certain extent with the economy of nature, "*dust to dust*," etc.

Dwarfs.

Anna Minerva Shearer, the child monstrosity, an object of curiosity to thousands of visitors, died at her parents' home, Stonersville, near Reading, Pa., Nov. 26. The child was ten years of age, and weighed fourteen pounds; was blind all her life, and unable to walk or talk. A sister, aged thirteen years, weighs twenty pounds, and is in the same condition. The parents are full grown, healthy, and strong, and the father is a blacksmith. The children's only sense was that of hearing, and they had to be attended to like infants.

A most interesting study would be in the direction of the causation of such seemingly inexplicable phenomena. Whether it were due to some peculiar moral condition of one or both parents at the time of conception, or to some subsequent influence acting on the early embryo.

The very intricacies and difficulties in the pursuit of the subject would make it interesting to some investigators.

German Scientists.

Much to our surprise we note the following item in the *Chemist and Druggist*:—

How scientific attainments are rewarded in Germany may be judged from an advertisement which the *Chemiker Zeitung* quotes from a journal devoted to the sugar industry in Germany. The services are required of an "academically-educated chemist, fully acquainted with the manufacture (sugar), who can undertake in summer the *coppersmiths' work*, or the oversight of the *teams of draught oxen*."

We were under the impression that science was highly prized in Germany, and that true scientists were thoroughly appreciated. Perhaps the sugar making concern in question was of such a class that the "*academically educated chemist* suitable for them would have more knowledge of oxen than of chemistry.

Prang's Cards.

The cultivation of a correct taste for color and form adds vastly to the enjoyment, and, we are not afraid to add, to the nobility of life. One of the most praiseworthy efforts in this direction is that of Mr. Prang, of Boston, who has offered large sums as prizes, for the best *Christmas card designs*, which he published in chromo-lithography, with appropriate original verses from our most distinguished poets. The idea is altogether an admirable one, and if any of our readers are at a loss what to buy for a Christmas present for old or young, married or single, rich or poor, they cannot go amiss in making the very small investment required, from 75 cents to $1.25, for one of these charming designs in colors. For catalogue and particulars, address L. Prang & Co., Boston, Mass.

Precautions Against Diphtheria.

The committee, appointed by the Board of Health of this city to draft a circular containing precautionary measures against the spread of diphtheria, have made their report. They recommend the usual methods looking toward isolation and disinfection. In particular we note two very good suggestions. 1st. To remove the patient to that room in the house that is furthest away from the inhabited portion; and 2d. To avoid inhaling the breath of or kissing any one who has a sore throat, during the prevalence of the epidemic.

This last suggestion is a most important one.

Promiscuous kissing has been infinitely more productive of disease of various kinds than the public ever dream of, and it is a practice that should be discountenanced. The people should confine their kissing propensities to members of their own families, and even then it is not always safe.

A Prolific Family.

The *New England Medical Monthly* records the following case:—

Among the papers of the late Thomas Atwater, of New Haven, Conn., the following memoranda were recently found:—

"Mrs. Mabie, No. 100 Twenty-ninth street, New York, of the firm of Topping & Co., has been married forty-eight months.

July 24th, 1858, had	1	child.
July 30th, 1859, "	2	children
March 29th, 1860, "	2	"
March 4th, 1861, "	3	"
Feb. 13th, 1862, "	4	"
Total	12	"

These children were all born within three years and seven months, and are all living and healthy. This is a copy from a memorandum given by the father, Mr. Mabie.

Anecdote of Jenner.

Dr. Jenner was a man of wit, and the following lines addressed to a lady upon the recovery of her daughter, and sent with a pair of ducks, afford a specimen of his facetious vein:—

"I've despatched, my dear madam, this scrap of a letter,
To say that Miss —— is very much better;
A regular doctor no longer she lacks,
And therefore I've sent her a couple of quacks."

Faith Cure.

A woman of Windham county, Connecticut, was afflicted with a chronic disease of the nerves. She got herself into such a state that she "believed God would hear and answer," and then prayed to be cured. The Danielsville *Transcript* says that her recovery is complete, and adds: "The present generation hasn't squeezed the orange of either material or theological knowledge."

Another illustration of the power of imagination, especially in hysterical women. We do not mean to say that God has not the power to work miracles, but we do believe that they are seldom so manifested.

An Infant Killed by Rats.

One day recently a family out in Kentucky went to church, leaving an infant in the care of a colored girl. She also went away leaving the child on a pallet on the floor, and when the family returned the baby was dead and horribly mangled by rats. Physicians should impress upon mothers, the great danger of leaving babies and young children alone. We have known many instances where serious and even fatal results have occurred from children drinking poisonous medicines when alone.

Garfield's Physicians.

The Garfield Board of Audit has filed its report at last. Dr. Bliss gets $6500; Drs. Agnew and Hamilton each $5000; Dr. Boynton $4000, and Mrs. Dr. Edson $3000. Though very slow about it, we must congratulate the Board on what seems to us a very fair adjudication of these very large claims.

Dead at 115 Years.

The daily papers report the death in this city, on Nov. 28th, of a colored woman, said to be 115 years old. While there was no positive evidence that she had attained this great age, yet it was generally credited by her family and we can see no reason to doubt it, since such great age is very possible.

Items.

—Dr. Edwin R. Maxson recently read a very interesting paper on "The Microscopy of Nutrition," before the Microscopical Club of Syracuse, N. Y.

—Dr. Janeway reports three cases of aneurism of the arch of the aorta in which the first symptom attracting attention was cervico-brachial neuralgia.

MARRIAGES.

DIEHL—WILLIAMS.—On the 11th of October, at the residence of the bride's parents, by Rev. O. W. Bickley, Dr. Oliver Diehl and Miss Sarah H. Williams, all of Phila.

ERWIN—McDOWELL.—In Mercersburg, Pa., October 12th, by Rev. H. G Mendenhall, Dr A. J. Erwin, of Mansfield, O., and Martha B. McDowell.

EWING—MILLS.—On October 11th, by Rev. John Jay Pomeroy, assisted by Rev. James D. Wilson, D.D., William A. Ewing, M.D., of New York city, and Matilda S. Mills, of Rahway, N. J.

HAZARD—RICE.—At the residence of the bride's father, in Newport, Ky., on Wednesday, October 25th, by the Rev. John Hugh Ely, assisted by the Rev. Mr. Stewart, J. Henry Hazard, M.D., of Cincinnati, and Miss Mary Thorp Rice.

HUNT—STECK.—In Brookville, Pa., October 3d, by Rev. Thomas J. Sherrard, assisted by Rev. Theodore Henderson, Robert M. Hunt, M.D., and Mrs. Rachel M. Steck, both of Brookville.

PALMER—ECKELS.—In Princeton, Ill., October 19th, by Rev. M. C. Williams, Charles A. Palmer, M.D., and Jennie J., daughter of James S. Eckels, Esq., all of Princeton.

SANTEE—MONTELIUS.—On October 19th, at the residence of the bride's father, in West Philadelphia, by Stephen W. Dana, D.D., assisted by Alfred Yeomans, D.D., Eugene I. Santee, M.D., and Mary Alice, daughter of William Montelius, all of Philadelphia.

SCHAFFER—ZOOK.—On Wednesday, Oct. 25th, at the Walnut Street Presbyterian Church, by the Rev. S. W. Dana, D.D., Charles Schaffer, M.D., and Ellen E., daughter of the late Major David Zook.

DEATHS.

FRISBY.—In this city, on Oct. 31st, after a lingering illness, Dr. S. Clarke Frisby, aged 33 years.

KING.—On Thursday, Nov. 9th, 1882, Kenneth K. King, M.D., aged 32 years.

McCOY.—In Doylestown, Nov. 7th, of apoplexy, Dr. Gilbert R McCoy, in his 67th year.

RICKARDS.—In this city, on Nov. 13th, Elias S. Rickards, M.D., aged 84 years.

THE

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Communications.

EXCISION OF THE WOMB, WITH FIBROID TUMORS.

BY J. M. F. GASTON, M.D.,
Of Campinas, San Paulo, Brazil.

I have to report a case which has been under my observation, the immediate charge of a colleague, of this city, Dr. Germano Melchert.

When first examined there were discernible through the abdominal wall, in the hypogastric and iliac region, three separate protuberances, evidently forming parts of one tumor; and upon extending the exploration through the vagina, it was ascertained that the os uteri was raised above its ordinary level and to the right of the median line, while the examination by the rectum revealed a mass projecting into the hollow of the sacrum, below the promontory of this bone, and kept in this position firmly, so as not to admit of being elevated by pressure of the fingers.

The diagnosis was that of uterine fibroids, and the woman, a mulatto slave of thirty-seven years, of rather delicate constitution and slim proportion of frame, was in a state of comparative good general health, with regularity in quantity and period of the menstrual flow. It was, therefore, agreed to put her upon a course of alteratives and tonics, with the hope of arresting the progress of the tumor. But after nearly a year of treatment, this was not found successful, and another minute examination was made by us, with the assistance of another colleague, Dr. F. Pereira Lima, who concurred in the diagnosis already made as to the nature of the tumor, and as to the indications for an operation.

The tumor now extends upward to the line of the umbilicus, and occupies the entire pelvic region, the lower portion resting in the concavity of the sacrum and thrusting the womb upward and obliquely, so that the os uteri is fouud immediately behind the imaginary line of division of the iliac and pubic bones, and pressed up against the bony rim of the pelvis, so as to nearly occlude the aperture of the neck of the womb. It was found impracticable to pass the sound into the small orifice of the external os; and it was left to conjecture as to the direction of the axis of the canal of the cervix and the position of the body of the womb, as there remained no practicable mode, in the absence of sounding, for ascertaining these points, except by inference from the displacement of the os uteri.

As it was expected that extirpation of the entire body of the organ with its appendages would be requisite, every preparation was made in advance for this operation, and on May 20th, 1882, it was undertaken by Dr. Germano Melchert, with the assistance of Drs. Pereira Lima, Antenor Guimaraes, Bento de Lonza, and myself. As I had the opportunity of witnessing some operations by Dr. J. Marion Sims and Dr. Nathan Bozeman, in ovariotomy, two years ago, and neither of my colleagues present had ever seen anything of abdominal surgery, it devolved upon me to guide in the operation as to the different steps of the laparotomy, and consequent ligation and excision, with the special provision for drainage and closure of the external wound. As my medical friend in whose infirmary the operation

was to be performed wished to avoid even the appearance of neglect, he had a carbolic spray apparatus at work in the room for an hour previous to the entrance of the patient, but it was stopped before even the chloroform was administered, and not resumed during the progress of the different steps of the operation.

The abdominal incision was made in the median line, extending from an inch above the os pubis to within an inch of the umbilicus, from which an effort was made to extract the indurated mass, but this being found impracticable, the incision was extended up and to the left of the umbilicus, until it extended to an inch above it. The entire nodulated tumor, with the womb located diagonally upon its anterior and lower face, and the Fallopian tubes with the ovaries, being now dislodged, a transverse incision was made above the cervix and the investing peritoneal coating was peeled off and left continuous with the upper surface of the bladder. The exact site and relations of the latter organ were defined by a catheter passed through the urethra and held by one of the assistants, while this most delicate step in the whole proceeding was executed.

In accordance with a previous understanding a tube was in readiness to pass up into the canal of the cervix, if this should be found practicable; but upon making the exploration with a long silver male catheter, the construction of the cervix was such as not even to admit this, and hence this measure had to be reluctantly abandoned. Strong silk ligatures were passed, with a needle, around the neck of the womb, which was not at all involved in the fibroid growth, and around the tissues upon either side, secured in three loops by three separate knots drawn as tight as was admissible without laceration. Yet, to afford additional security against the much to be feared secondary hemorrhage, a strong silk cord, consisting of four large silk ligatures twisted together, was thrown around the whole, upon the distal side of the ligation already made in three segments. The operator now thought there could be no doubt about using the knife or scissors to divide the pedicle, but realizing, from my study of these cases that every caution that can be observed is not too much, the ecraseur was advised and adopted for the excision, while the fingers of assistants were kept between the line of the chain and the strong cord that circled the entire pedicle. No part of the fibroid mass remained with the pedicle, and there was no indication of any hemorrhage from the incised surface. Some small coagula that had formed from the blood that entered in the dissection of the anterior peritoneal investment of the womb, were removed from the cavity, and a large sponge introduced, which had been wrung out of a ten per cent. carbolic solution, by which the remaining sanguineous effusion from the early steps of the operation was removed, and the cavity was carefully wiped out with old carbolized linen cloths, until there was scarcely a stain left upon them. There was but one opinion on the part of all present in regard to the further management of the case.

As to the disposition of the several ligatures, all agreed that both extremities of each should be retained, and reunited in one cord, to be brought out at the lower part of the abdominal incision jointly with a carbolized rubber drainage tube of the calibre of one-fourth of an inch. This being done, and waiting for a few minutes to observe whether there were any indications of hemorrhage, of which none appeared, the inner peritoneal membrane was closed by six interrupted catgut sutures, and cut off close to the knots, with a view to leave them for absorption. The external incision was closed with six silver wire ligatures, passing deeply into the subcutaneous tissues, but without penetrating the peritoneal coating. Three points of silk ligature were used to unite the curved line around the navel. Before applying the external dressings the patient was turned carefully upon her left side, with the drainage tube and cord of ligatures lying upon that side, while moderate uniform pressure was made upon each side, and yet not a drop of blood appeared at the lower angle of the incision.

The external applications consisted of carbolized lint over the entire abdomen, covered with carbolized cotton, and this protected by the impermeable cloth, all being secured by a moderately firm bandage.

The dressings being complete, and the effects of the chloroform having disappeared, the patient was removed from the operating table to a bed in the same room. The temperature being taken half an hour afterwards, it then being 2.30 P. M., was found to be somewhat below the normal standard, registering 36.5 by Centigrade thermometer. Observing the pulse at the same time, it was found to be feeble and accelerated, giving 120 beats to the minute. Brandy was given and afterwards aqua ammonia, without improving the circulation, and brandy was resorted to by subcutaneous injection, to no effect. The hypodermic application of quinine and morphine was not attended with any perceptible change for

the better, and thinking we had to deal with the overpowering collapse of shock, the interrupted current of electricity was used assiduously, from the præcordial region to the extremities, and from the back of the neck to different parts of the body. Our patient was now pulseless and without power to swallow or to speak, and it seemed that a very slim hope remained for resuscitation. Friction, hot bottles to the extremities, etc., etc., all seemed of no avail.

In the midst of this, it was discovered that all the dressings were saturated with blood, and we realized that though the enemy appeared in a different form, it was likely to be quite as serious as the dreaded element of general nervous prostration involved in the idea of shock. It was in some respects, however, a relief to combat a new phase, originating from a source that admitted of connection, however remote might be the prospect of relief. The dressings were removed from the surface of the abdomen, and substituted by cloths wrung out of cold water and repeated every few minutes. Beef tea with brandy was given as soon and as often as she could be induced to swallow, and ultimately the strong beef soup was used as an enema. The blood continued to discolor the cloths for the space of several hours, but in diminished quantity. The temperature was taken again at half-past six in the evening and was 37.2 Centigrade.

May 21st. Upon visiting the patient early in the morning, it was found that some discharge of blood still continued, and that while the pulse was perceptible, the prostration was marked. She complained of nausea, and vomited while I was present, being evidently the accumulation of fluid ingesta. Fresh, sweet milk and brandy were advised, and to continue the enemata of beef soup. Upon inspecting the dressings after the retching, it appeared that the sanguineous discharge that was forced out was not a recent flow, but had been retained and mixed with serous collections in the cavity of the abdomen. This encouraged a hope that the hemorrhage might become permanently checked. Speech still quite indistinct.

At my mid day visit it was found that all the wet cloths had been removed, and that the antiseptic dressing had been reapplied by the surgeon in charge, and that no blood whatever had escaped for several hours, nor had the patient vomited any more.

The urine being drawn off by the catheter, presented nothing abnormal in quantity or quality, giving thus assurance that the ureters had suffered no violence by the steps taken in the operation. Labarraque's wine prescribed.

Upon visiting the patient in the evening, the exudation by the drainage-tube and the capillary conduction of the cord of ligatures did not indicate fresh hemorrhage, but still served to moisten the lint immediately around the opening with the sanguineous discharge. She had vomited again late in the afternoon, and complained of acidity and burning in the stomach, so that it was agreed to give her occasionally a small quantity of a mixture with bi-carbonate of soda, laudanum and peppermint. The extract of beef, made by filling a large-mouthed bottle with the small pieces and placing this in another vessel with boiling water, until thoroughly cooked, was recommended in conjunction with port wine. The enemata of beef soup to be continued. Her pulse continues so weak as not to be counted at the wrist, yet there is not so great prostration of the physical powers, and she speaks audibly and intelligently when addressed. The lower extremities are as warm as natural. Temperature at 9 A.M., 37°; at 2.30 P.M., 36.7°; at 6.30 P.M., 37°; at 10.30 P.M., 36.7° Centigrade. This scale, being in use here, can be transferred to Fahrenheit.

May 22d, was called before daylight by my colleague, Dr. Melchert, to assist him in reducing a small omental hernia that had occurred immediately below the umbilicus, where, inadvertently, a space had been left between the silver wire suture and the points of silk that were used in the curved incision around the navel. By removing one of the loops of the silver wire the protrusion was readily reduced, and as it presented no signs of strangulation or inflammation, it is hoped that this accident may not seriously complicate the result. In the space where the hernia occurred, three points of silver sutures, penetrating all the tissues of the abdominal wall, were made to substitute the one removed, and another inserted on a level with the navel.

The patient has lost but little blood during the night, and her general condition is more promising, though the pulse is barely perceptible; her extremities are of natural temperature, while her speech indicates more strength. The extract of beef, with wine, has been acceptable to the stomach, and she has vomited but once.

Before mid-day I was summoned, according to appointment with my colleagues, and found for the first time since the afternoon of the operation that the pulse could be counted, being 140 per minute, and yet very feeble.

The urine, which had remained for twelve

hours, was drawn with the catheter, and measured twelve fluid ounces, it being understood that in the future it should be removed every six hours. The vagina was washed out with a tepid carbolic solution, presenting some mucous discharge in the fluid that was returned. The abdominal cavity was thoroughly cleansed with a two per cent. carbolic solution, in a large syringe, by passing a female catheter along the side of the drainage tube, through which and by the opening around it, the fluid mixed with blood flowed out. At first it was highly colored, but upon the third repetition of the injection it returned only slightly tinged with blood. This was done with the patient upon her right side, and she was afterwards put upon the left side, so as to drain out all the fluid. The antiseptic dressing was then re-applied with the patient resting upon her back, and she dropped asleep soon afterwards, being apparently free from pain. It was agreed to give a pill of two grains of sulphate of quinine with four grains of ergotine every two or three hours, and to use an injection into the vaginal canal of a strong solution of tannin and ergotine occasionally, according to the amount of hemorrhagic discharge from the incision. Nourishment to be urged to the extent that it may be well received by the stomach, and continued by enemata.

At the evening visit the lint next the incision is found soaked with blood, after having been changed during the afternoon, so that it is very evident that the hemorrhage is not arrested. But the styptic vaginal injection, though in the room, has not been applied, and a hope is entertained that its use to-night may yet prove advantageous. The pulse is more distinct, and counts 138 to the minute. The extract of beef with wine has not been rejected, though she has had nausea occasionally. She has taken the pill of quinine and ergotine regularly during the day, and the urine was drawn off in the afternoon, being nearly as much as in the morning. Temperature at 9 A.M., 37.8, at 2 P.M., 37 at 10.30 P.M., 37.8, Centigrade, indicating a slight increase from yesterday's record.

May 23d. Examined at 9 o'clock A.M., the pulse counted only 120 to the minute, and the lint which had been applied over the incision at 9 o'clock last night was only moistened with blood immediately around the aperture at the lower angle, none having run out at the end of the drainage tube below.

The mixture of 3 drachms of ergotine and 1 drachm of tannin in 12 ounces of water was applied in the vagina and in the rectum last night, and seems to have had a marked effect in restraining the hemorrhage. There is slight distention of the large intestines, causing tympanites and some increase of sensibility over the lower part of the abdomen; yes, there are most clear indications of peritonitis. The urine has increased in quantity, and though it had been drawn off only three hours previously, there was passed by the catheter ten ounces of urine at this time. Upon washing out the cavity of the abdomen with the two per cent. carbolic solution, the contents of the first syringe returned colored deeply with blood, but upon using the third there was only a slight reddish tinge of the water.

The astringent injection within the vagina and rectum was repeated this morning. It was understood that she should take an ounce of castor oil with a drachm of spirits of turpentine, to-day, to relieve the bowels.

At night the medicine had not acted upon the bowels, and the distention was much increased, especially in the epigastric region and hypochondriac, corresponding to the curve of the colon. An elastic tube being passed up through the rectum to the distance of eighteen inches caused no escape of air, and hence the impression that the tympanic condition resulted from intestinal flatus seems not to be founded in fact. Castor oil and warm water were thrown up into the colon, but without producing evacuation from the bowels, and a repetition of the oil and spts. turpentine was ordered internally.

The pulse continues at 120 beats to the minute, and the flow of urine is so abundant as to necessitate being drawn every three or four hours. Having passed five hours this afternoon there was an accumulation of twelve ounces of urine. The vaginal canal was washed out with a tepid two per cent. carbolic solution and a portion of the astringent mixture was injected afterward.

There has been some blood discharged from the lower angle of the incision, yet the quantity is less than on the previous days, and the strength of the patient has not been affected by it. A strong camphorated turpentine liniment was passed over the whole of the distended abdomen with the lint over the incision saturated with carbolized oil, and outside of this was placed the cotton batting with the oil silk to cover the whole. Temperature at 9 A.M., 37.5, at 4 P.M., 38.2, at 9 P.M., 37.8.

May 29th. At 8 o'clock A.M., found the pulse still with 120 beats to the minute and with more volume than yesterday. The distention continues very marked in the epigastic region, with tympanic resonance upon percussion, and can

only be explained upon the supposition of air in the stomach. The abdominal tenderness has not increased, but the hemorrhage continues to moisten the lint around the opening at the lower angle of the incision within three or four hours. With the second dose of oil and turpentine no effect was produced, and a full dose of citrate magnesia had a very slight action upon the intestines in the latter part of the night and this morning.

The two per cent. carbolized wash was less tinged with blood than on any previous occasion, and in turning the patient from side to side, with gradual pressure over each side of the abdomen, there was not so much complaint of soreness as yesterday. The vagina was also washed out, and the mixture of ergotin and tannin injected, leaving a portion in the canal. Assafœtida and ether, with fennel seed tea, is to be used, with a view to dislodge the gas from the stomach, which organ is evidently relaxed and distended, with a tendency to decomposition.

Upon visiting the case in the evening, it was found that free alvine evacuations had ensued during the afternoon, and the patient had also vomited immediately previous to my entrance, which had caused a considerable increase of hemorrhage, with the florid hue of fresh arterial blood, the pulse being somewhat accelerated, so that it beat 126 to the minute. The general condition indicated more prostration, and there was slight perspiration over the surface of the body. The urine having been drawn every three or four hours, yielded on this occasion about eight ounces, which presented its normal appearance. Being called to see her again about 9 o'clock at night, there had been no further hemorrhage, though vomiting had occurred on this occasion also, and the pulse had resumed the standard of 120 to the minute. Upon a careful examination of the abdomen it was now observed that the tympanitic condition extended in a slight degree below, and continued in a less degree throughout the epigastric and hypochondriac region, without any increase of sensibility to the touch.

The pill of ergotine and quinine, which had been suspended on account of the indications for the assafœtida and ether, were resumed, with the addition of a capsule of spirits of turpentine every two or three hours. Chlorodyne was applied over the distended epigastric and hypochondriac regions, with a view to exercise compression, and thus restore tone to the internal parts, if the tendency to disintegration can be stopped. Temperature at 9 A. M. 37.2, at 3 P. M. 37.7, at 9 P.M. 37.5.

May 25. At 8 o'clock in the morning found the patient with a very feeble pulse of 125 per minute; anxious, careworn expression of countenance, enlargement of the whole abdominal region, but less tympanitic distention of the epigastric region, with the aperture in the lower angle of incision gaping, and exuding a sanious discharge. There has been no further hemorrhage, and the diminished sensibility upon any pressure around the incision is significant of a loss of vitality. She has not vomited this morning. The urine continues without change in quantity or quality. After washing out the cavity with the carbolized solution, simple warm water was used, preparatory to an injection of solution of permanganate of potash, having the strength of one-half of one per cent. This returned without appearing to be decomposed by contact with the tissues. A large poultice, with Peruvian bark, camphor and charcoal, was laid over the abdomen, and to be renewed, from time to time, as a corrective. Decoctions of Peruvian bark, with tincture of nux vomica and carbonate of ammonia, to be alternated with the wine of Labarraque, hourly. The prognosis is, of course, most grave, in view of the gangrenous features, and yet nothing should be left undone in the treatment. Temperature at 7 A. M. was 37.8 Centigrade.

The patient gradually declined, and died at mid-day.

The autopsy was made at 5 o'clock in the afternoon, by Dr. Melchert, and myself, with the presence of Dr. Antenor Guimaraes and Dr. Bento de Lonza.

Upon removing the interrupted suture of silk above the navel and of silver wire below, the entire line of incision opened, showing that no adhesion had been effected in any part, either of the skin, the subcutaneous tissue, or the peritoneal membrane.

The entire intestinal canal was filled with air, and the stomach enormously distended, as a result of the decomposition.

Adhesion had commenced in various parts between the investment of the intestines and the lining of the lateral walls of the abdomen. There were present in the lower posterior portion of the abdominal cavity, diffused among the coils of the small intestine, on either side of the lumbar vertebræ, signs of half decomposed blood. The lining membrane of the abdomen in these parts especially gave indications of discoloration, and the entire peritoneum was more or less engorged, and afforded evidence of the

inflammatory process that had been developed. Removing the stomach and intestines, a considerable accumulation of sanguineous fluid was found in the lower pelvic cavity. Upon carefully inspecting the relations of the ligatures, the cord, consisting of four strong silk threads twisted together, which was tied around the whole pedicle on the distal side of the other three ligatures, had escaped from its original position, and lay loosely over the point of the stump of the cervix uteri. Neither of the other ligatures could be detached without cutting away the tissues on the distal side of each, and yet there was evidence that the middle ligature had cut into the tissues of the cervix, and afforded a clue to the probable source of the hemorrhages in the division of this substance supplied with vessels. The ligatures each remained well knotted, and retained their hold securely upon the several parts, with the exceptions noted, dependent on the yielding of the substance of the cervix uteri.

That the profound prostration resulting from the hemorrhage led to the subsequent result of decomposition, peritonitis, and in the end to septicæmia, cannot be doubted. Whether a timely recourse to a second ligature could have availed to avert the fatal result is so problematical that perhaps no operation would be warranted in opening up the abdominal cavity under the circumstances presented in this case after the hemorrhage was discovered. I am more thoroughly convinced, by this case, of the necessity of some measure that may adequately compress without lacerating the tissues of the pedicle, and the plan proposed, of tying the cervix firmly around a tube within its canal, offers advantages which no other process is likely to effect so satisfactorily.

These notes, made immediately after the several observations of the patient, are presented as a faithful delineation of the progress and termination of the case.

A review seems requisite, of the circumstances connected with the general condition of this patient, the freedom from adhesion or other complications on the part of the tumor, the immediate apparent successful termination of the operation, and the subsequent vital depression coming on with hemorrhage.

If there was an error committed in the mode of ligating the pedicle and in the departure from the usage of most operators by transfixing the cervix with a double ligature which is knotted upon either side, it would still appear that the division of the tissues into three segments instead of two should not, *cæteris paribus*, have predisposed to hemorrhage. If there had been only two loops, and either of them had been drawn so tightly as to press unduly upon the one or the other division of tissues, and thus cut through its texture, the same result must have ensued as that which occurred in this instance. We know that this is not an unusual accident in the over-tight ligature of the umbilical cord with a fine round silk thread, and hence a number of threads are most frequently employed together for securing it, or a soft narrow tape is even preferred for the ligation, to obviate the liability of cutting through the delicate texture of the umbilical cord. Each of the three ligatures employed in the three several loops for the respective segments, consisted of two distinct large threads of suture silk, while that around the whole pedicle contained four such threads, so that the tendency of a single cord to cut the tissues was not overlooked.

Yet the desire to secure effectually against the shrinkage of the mass included in those three separate loops, led to closing them too tightly, and even if the outside large loops of four strands had held firmly at the outset it could not have availed against the hemorrhage resulting from cutting of a vessel within this line and upon the cardiac side of this constriction. Although the tightening was done by the hand of the operator, my own finger was placed upon the first knot to secure it until the second knot was made in each loop, and neither I nor any one of my colleagues present thought for a moment that either of the loops were drawn too close. The one upon the right side of the cervix was examined by Dr. Pereira Lima, and supposed to be too slack, but a special examination satisfied me that it was sufficiently tight, and the inspection of the loops at their removal in the autopsy convinced me of this fact. If either ligature had been so slack after the shrinking of the tissues as to have admitted of the escape of some blood, it is not at all probable that the loop beyond of four strands yielded so easily as to have allowed so much blood to escape as was discharged within less than an hour after they were applied. The most rational inference, therefore, is, that the laceration or cutting of the cervix by the closely drawn ligature of two strands of silk was the occasion of the sudden and profuse flow of blood. It behooves us, therefore, to profit by this sad experience, and use in the future the flat tape ligature or a larger number of strands in the cord.

But for the fact that an opening was left at the lower angle of the incision, this patient would perhaps have died without discovery of the hemorrhage, as the whole train of nervous prostra-

tion and circulatory depression met a ready explanation from the supposed shock which is so prone to be manifested in this class of operations. Had the pedicle been secured outside with a clamp, it is very evident that such a result would not have ensued, and it must be allowed that the case was a favorable one for such appliance, as there could have been no difficulty in bringing the pedicle to the surface. But, whatever may be the security against hemorrhage offered by the clamp, it presents counterbalancing troubles that it is very desirable to avoid, and so soon as a like security against hemorrhage can be guaranteed by some other process, this most bungling device is destined to be banished from abdominal surgery by all gynecologists.

With the flat ligature and the intra-cervical tube, it is believed that all difficulty on this score can be obviated, and if this most desirable end can be attained consistently with perfect drainage and diminished risk of peritonitis and septicæmia, it must be allowed that this modification in hysterotomy is quite an important element of progress in abdominal surgery, and should be adopted by surgeons.

A careful consideration of the details presented, as to the construction and application of the intra-cervical and intra-vaginal tubes, with the special mode of ligation of the pedicles around them, is urgently recommended.

MEDICAL MISSIONS IN HEATHEN LANDS.

BY. M. P. BARKER, M.D.,
Of New Castle, Pa.

Before proceeding to a discussion of the principal topic embraced in my theme, viz., Medical Missionary Work, it would not be improper to make a diagnosis of our case, or, in other words, to review briefly the condition of the science and the art of medicine and surgery, in the lands called heathen.

In the most of these countries the status of the healing art, prior to the advent of Medical Missionaries, was much the same as it had been for thousands of years, the reverence of the people for their ancestors forbidding them to make any change. They worship the same gods, bow at the same shrines, make the same obsequious salaams, cultivate the soil in the same way, resisting any innovation upon the traditions and practices of their fathers.

In nearly all heathen countries disease is supposed to be of supernatural origin, sent upon them by their gods, or by the spirits of their departed ancestors. A recent writer from Ningpo, China, referring to this "one article of faith, common to all sects," says that it "leads to no kindliness or respect from sons to their living parents, but to a slavish dread of the dead, whose power to avenge any slight or neglect is so firmly believed in that no amount of pains and expense is spared to propitiate them." This belief, inculcated by Confucius and taught by the priests, has become so deeply rooted, that in order to protect themselves "from the inroads of hosts of spirits who are supposed to crowd in, many families are often permanently impoverished by the drain to which they are thus subjected." The same writer states that he had heard a calculation by one entitled to know, that "thirty million dollars are annually expended in China, at the three great festivals, in honor of the dead."

A belief in the existence of "disease spirits" is common, not only in heathen lands, but also among the aborigines of our own country, as well as among the untutored in Mexico and South America; and the physician, magician, priest, or astrologer who can exorcise these "disease spirits" often receives divine honors. The pathway of the smallpox spirit is, by many, supposed to be obstructed by thorns and bushes thrown in its way, or by digging trenches across its track, or by scattering stinking oils around their dwellings. Charms and amulets are worn suspended around the neck, containing a word, as "abracadabra," for instance, to keep away "disease spirits." The deafening noise of gongs and fire-crackers are also resorted to for the same purpose.

In China, Lecompte states that four thousand years ago Hoang Ti composed the code by which their physicians are guided to the present day. They have no knowledge of anatomy and physiology, in consequence of their superstitions preventing them from dissecting the human body. The nature of disease and the action of remedies are practically unknown. In obstetrics, the most absurd practices prevail. Dr. J. G. Kerr, of Canton, says: "I have been called to remove an unborn head, when the body had been torn away. I have seen barbarous mutilation of the mother, and the skull of the unborn child broken with rude instruments, in vain attempts to extract it. On several occasions I have seen the sacrifice of both mother and child, when a simple forceps operation would have saved one or both. These are specimens of cases that must be of frequent occurrence in that vast population. The belief is prevalent that the fœtus is

an active agent in its own birth, and I have seen a healthy woman allowed to die, while the midwife and friends were entreating the child to come away, after all uterine power was exhausted by protracted labor."

Their knowledge of sanitary laws is limited. The streets in their cities are narrow, crowded and filthy, with no drainage and no removal of filth, except by the agriculturist; no isolation of contagious diseases; no hospitals, insane asylyms or almshouses for the poor, and in case of war, no surgeons for either army or navy.

China is a vast sepulchre, her tombs containing millions of her population swept into untimely graves for want of knowledge of sanitary laws and a scientific knowledge of medicine.

The same superstitious ideas with reference to the origin of disease has existed in Egypt for thousands of years. The deity Isis was believed to possess a large amount of medical skill, and many diseases were attributed to her anger. Another of their medical divinities was Taaut. After the discovery of the manufacture of paper from the stalk of the papyrus, they collected the knowledge of Taaut in a book entitled "*Embre*, or *Scientia Casualitus*," to which the physicians were compelled to scrupulously adhere. If they did not they were punished with death, no matter what the issue of the disorder. Like other semi-civilized or barbarous peoples, they had no knowledge of anatomy or physiology, being afraid to dissect a human body for fear of incurring the anger of their gods; a very limited exception would have to be taken to this statement, as the *Paraschites*, or embalmers, removed the brains through the nostrils, and opened the abdomen to remove the contents. Egypt at the present time is becoming so rapidly Europeanized that many of their superstitions are giving way to the rapid advance of scientific knowledge. Rev. David Strang, who spent eleven years as a missionary in Egypt, and who "dabbled some in medicine," in a recent letter to the writer, says, "In Syria and Egypt medical men and religious advisers are to a considerable extent permitted to enter female apartments that are barred to all other men not members of the household. But even in these countries there are many households where a medical man would not be admitted." In the whole of the Turkish dominions woman is degraded and downtrodden. The heavy black veils and the seclusion still exist and will continue to exist until there is a much higher type of civilization. It seems marvelous that the Egyptians, who boast of their great antiquity, their civilization, their long line of Pharaohs, their pyramids and temples, their sarcophagi and magnificent tombs, their mummies and their schools of philosophy, should have remained in such profound depths of ignorance and superstition in the healing art. But the people are like the idols whom they worship; they have eyes but see not, ears but hear not.

In India the greatest obstacle to improvement in medical knowledge, and which has kept the people enthralled in ignorance for thousands of years, is caste.

The Brahmins comprise the savans and physicians, their knowledge being derived from their Vedas. But caste prevented them from dissecting the human body, and consequently they had no foundation upon which to rear a sound, rational, scientific structure of medical knowledge.

If a Brahmin should touch a dead body, even though it be his own father, it could not be atoned for, except by many days of purification and much alms. If a Pariah should touch a Brahmin, the latter would be considered justifiable in killing him.

The Zenana caste cuts off access by the male physician to the wives and daughters of what is called the High Caste portions of society. It is the testimony of missionary ladies, that when sick they are neglected and permitted to die, rather than call a male physician. Weaker than man, physically, she is not only compelled to suffer the diseases common to both sexes, but she has also to bear the pangs of maternity without the aid of scientific skill or the bliss of an anodyne to relieve her sufferings. Behind those thick veils and those barred doors there has been an amount of suffering which the power of language could not describe.

During the present century, through the efforts of missionaries and the fostering care and aid of the English government, a very great change has been effected. Caste is not dead, but it is gradually losing its hold, in consequence of the dissemination of medical knowledge.

I do not propose to enter into further detail of the condition of medical knowledge in other heathen or semi civilized countries; the ones already mentioned being typical of the rest. Suffice it to say that they are all fettered by the same chains of ignorance and superstition, all under the influence of their gods; all destitute of a knowledge of anatomy and physiology, and in many cases ignoring the profession altogether.

Among the western nations medical knowledge has reached a high degree of perfection.

The nineteenth century will be renowned in history for its research and progress in every department of the healing art. But its renown will be greatly enhanced in consequence of the efforts made to propagate this knowledge in heathen lands, which has proved to be no longer an experiment, but a decided success. By whom, how, and with what success, will be reserved for future articles.

(To be Continued.)

Hospital Reports.

MEDICO-CHIRURGICAL COLLEGE.

SERVICE OF F. LE SIEURE WEIR, M.D.

Clinical Professor of Dermatology.

Reported by Dr. H. B. Nightingale, Chief of Clinic.

Acne.

Case 1.—The young man before you to-day is an Englishman by birth, 21 years of age and unmarried. His occupation is that of a laborer. About 6 years ago his face, which had previously been clear of any eruption, showed here and there small, red pimples, some of which pustulated, others again remaining stationary for a few days, and then disappearing. From being a few in number they gradually increased until he was 18 years old, at which time he began to shave. Since then the condition now observable has been present, new crops appearing to take the place of those which had run their course. His appetite has always been good, in fact, too good. Bowels inclined to constipation. He sleeps well, has never had gonorrhœa or syphilis. A close inspection of the face shows this eruption to consist of small, elevated points or pimples, which are solid, and have a feel not unlike the pustules of smallpox, vivid red in color, and causing some little sense of discomfort by the tension of the epidermis, commencing at or shortly after puberty, with no specific history, an evidently deranged digestion and habitual constipation.

These give us all that is necessary to know about the disease. Masturbation is a very frequent cause of this affection, or if not a direct cause, largely assists in keeping up the irritation. There is no history of such practice in this case.

He will be ordered 5 gr. doses of lactopeptine 3 times a day, to be followed by a bitter tonic. Also the following:—

℞. Ext. cascara sagrada, fld., f℥j.

Sig.—Gtt. x, in sweetened water, before each meal and at bedtime.

This will have the effect of producing a free evacuation daily, and if he will continue its use for some time his constipation will yield permanently. I know of no drug which relieves habitual constipation so effectually as the cascara sagrada. Locally he shall have a soothing ointment of oxide of zinc and cosmoline, with a few drops of carbolic acid. The local treatment is secondary, for upon the relief of the dyspepsia and constipation a marked change will be observed. He will be directed to let the beard grow, thereby removing one potent cause of irritation.

Erythema Simplex.

Case 2.—A. M., 30 years, Irish, and employed as a cook in one of our hotels. She is constantly bending over a hot range, owing to her occupation, and some weeks ago noticed that the redness of the face, which had previously disappeared after a time, began to remain longer. Presently it became so bad as not to leave at all, and gave rise, in addition, to burning, smarting, and more or less itching. The redness, as you have seen, involves pretty much the whole face, not, however, producing a uniform discoloration. The redness is in patches, which coalesce with each other, leaving a ragged margin. By passing the finger over the surface the patches are found to be very slightly raised, and the redness disappears, returning again instantly upon removing the pressure. It is a case of erythema simplex, or superficial inflammation of the skin, from external irritation. In the way of treatment, removal of the exciting cause is the primary object. In all idiopathic cases it is the one thing to do. If we can get the patient's coöperation in this we will order her a simple oxide of zinc ointment, with possibly a few drops of carbolic acid.

Urticaria.

Case 3.—H. J., 18 years. Here is a young lady who comes to us suffering from "the hives." Here, upon the forearms, you see these large, red blotches, each with a pale or whitish centre, no regularity as to distribution, but lying close together on some parts of the limb, while upon the hand, considerably removed from the others, are more patches. They are quite prominent, and give rise to a most exasperating sensation of burning and itching. Even now you see she cannot retrain from scratching the parts. Both arms and hands, and the face as well as neck are involved. Doubtless the body and lower limbs share the affection in turn. There is never any difficulty in recognizing the disease, the wheals are so characteristic. In no other disease do we find wheals appearing suddenly, and, after remaining a varying time disappearing as rapidly and mysteriously as they came. It is a most common difficulty, and the diagnosis is easily made out. But *what causes* it is not always so easy to ascertain. A case of urticaria or nettle rash in which the exciting cause is unknown is one of the most stubborn and unsatisfactory of all, and the doctor to whose lot it falls is apt to become disgusted with the study of dermatology. The exciting causes of urticaria are divisible into three heads: local irritants, a polluted circulation, and reflex irritation. Without going deeper into the subject, let me say that the first two causes are easily disposed of, and it now remains to be seen *how* reflex irritation is responsible. The patient yesterday morning indulged in fish for breakfast, and in the course of the afternoon felt a burning and smarting upon various parts of the body. It was not severe, however, till night, when she got warm in bed, at which time it became almost unbearable. Once or twice before fish has had the same effect

upon her, but not for several years. She is of a nervous temperament, evidently, and this fact renders it all the more easy for the disease to manifest itself. My assistant tells me that just before coming into the room there was no sign of wheals, yet upon her entrance, I was able to show you some very fine specimens of them. The disease is, I feel convinced, a neurosis, not alone in the case before us, but demonstrably so in every case. The divisions I gave you a few moments ago are made for the sake of convenience only, and if the first two so-called heads be eliminated I think that reflex action can be clearly shown to be the cause of the cutaneous phenomena in every case.

The treatment in the present case shall consist of three compound cathartic pills. Considerable constipation is present, and as no stool has been had since the eating of the fish, it will have the effect of removing the remnants of it and clearing out the alimentary canal. Locally, a lotion, as follows:—

℞. Ammoniæ carbonatis, ʒss
Plumbi acetatis, ʒj
Glycerinæ, fʒj
Aquæ rosæ, fʒv. M.

Sig.—Use as a wash, several times daily.

Without doubt our patient will obtain relief by these measures.

Eczema Aurium.

Case 4.—Willie S., aged two years. The child before you is brought here on account of an eruption which made its appearance in the neighborhood of the ears about two and a half months ago. As you see, not only the cleft behind them, but also the auricles themselves, are involved. The inflammation, however, does not seem to have extended into the auditory canal to any appreciable extent. A hot, red, tense and swollen surface, with a thin, serous fluid constantly bathing the parts; numerous small vesicles, in varying stages of development; a feverish state of the body, and constant fretting; a strumous diathesis, poor appetite and costiveness, all of which are present, mark the case unmistakably as one of eczema. The suffix of aurium designates the seat, not that it differs from the same variety in any other portion of the body.

This state of affairs has been going on for a period of two or three months, the symptoms becoming gradually worse, until life has become a burden to him, young as he is. If allowed to go on the symptoms would probably not change noticeably, except the discharge, which would become purulent. Indeed, it is so to a slight extent already. The only wonder is that such has not been the case long ere this. Being a catarrhal inflammation essentially. it is more apt to assert itself in an intractable form when occurring in lymphatic children.

We must try to relieve the little fellow, and to this end will advise the following to be applied to the parts two or three times daily:—

℞. Zinci oxidi,
Zinci carbonatis, āā ʒij
Glycerinæ. fʒiij
Aquæ rosæ, q. s. ad fʒiv. M.

Sig.—Shake well before using.

The surface is to be dried by *pressing* gently with a piece of soft muslin. Never *wipe* an inflammation. This lotion should leave a fine powder upon the surface, and by the protection which it affords the parts the air is excluded. He shall have also:—

℞. Potassæ chloratis, ʒj.
Fiat. chart. No. xx.

Sig.—A powder to be dissolved in water and taken thrice daily.

Were the patient older we could administer cod-liver oil with advantage, but young children do not, in my opinion, assimilate it so well, and, moreover, will not take it. The chlorate of potassa here answers an admirable purpose as an alterative, and in the present case will, I feel sure, fulfill all the indications of the oil. Some time will be required to effect a cure, but I think we may safely predict success in the end. The mother will be directed to bring him back in a week, at which time he will be shown you, and any necessary changes in the treatment effected.

UNIVERSITY HOSPITAL.

CLINIC OF JOHN ASHHURST, JR., M.D.,
Professor of Clinical Surgery in the University of Pennsylvania.
Reported by Louis J. Lautenbach, M.D.

Re-excision of the Knee, Nine Years after Previous Operation.

Case 1.—The girl whom I will bring before you to-day was a patient of mine nine years ago, at the Episcopal Hospital, when I performed, on her right leg, the operation of excision of the knee. She remained in the hospital for over a year after the operation, and left with a perfectly straight limb, and with, apparently, firm, bony union. Two years after she left the hospital, however, the leg again began to contract, the deformity steadily increasing until three years ago, when she was obliged to resume a crutch, which she has used ever since.

At the time of the operation she was eight years old, so that she is now seventeen. She now finds it necessary to do something for herself, and, as her contracted knee prevents her from obtaining employment, she comes back to know if her leg can be again straightened. Had she returned on the first appearance of re-contraction it would have been easier to effect the object by the use of suitable splints and bandages. I succeeded, some years ago, in a case of re contraction of the knee-joint excision, in restoring the limb, by applying a padded posterior splint and an india-rubber bandage, so as to straighten the limb by means of elastic pressure.

A point which is well illustrated by this case is the occasional long continuance of the soft condition of the callus in children. The same thing is seen in cases of fracture; union occurs very quickly, and the bone appears firm, but re-fracture may occur at the same point, owing to the soft or cartilaginous state of the callus, many weeks or even months subsequently. In this case the callus must have remained soft for a very long time, as the limb appears to have continued straight for three years, and flexion not to have begun until the end of that time.

Bony union is now complete, and under the

circumstances all that can be done is to straighten the leg by another operation. This will consist in exposing the angle of the limb, and removing with the saw a wedge shaped portion of bone. As a necessary consequence of this operation, the limb, already shortened by the previous excision, will be still further reduced in length, but will be straight and useful.

This operation is not, I think, as serious as that of excision of the joint, and will not, probably, be followed by as much constitutional disturbance. It is still, however, a grave operation, making a compound fracture, which will, of course, be attended by the ordinary risks of that injury.

The saw which is so useful in ordinary operations of excision, Butcher's saw, is not so well adapted to an operation of this kind, and I will use instead the ordinary amputating saw. The splint to be used after the operation is the simple bracketed wire splint, with a movable foot-piece, which I employ for excision of the knee. It allows the leg to be firmly fixed above and below the wound, while the wound itself is left open, and can be dressed every day without disturbing the rest of the limb.

Examining the limb, we find the angle to be rather less than a right angle, it being not more than 80°. We see here the cicatrices of the old operation, which I will avoid in cutting down to the bone.

In overcoming the deformity here, we must be careful in regard to the popliteal artery and vein, which may possibly be shortened in connection with the contraction of the joint, under which circumstances they might be ruptured in a forcible effort to straighten the limb. The hamstring tendons may be subcutaneously divided, if their contraction interferes with the restoration of the part to the straight position.

I will not use the Esmarch bandage, but will tie the vessels as they are cut. I will make an incision a little above the cicatrix, down to the bone, and will turn flaps upward and downward, so as to expose the prominent part of the bone. Now, with the saw, I cut out a wedge-shaped piece, including the base of the femoral condyles and the upper part of the tibia. I take care to avoid opening the medullary cavity of the femur, as its implication in the operation would entail additional risk. If the parts do not come readily together when the wedge is removed, additional slices can be taken away from either side. A hole is next drilled through the anterior edge of each bone, and a strong silver wire introduced and twisted, so as to fix the bones together. The use of a bone suture is a useful precaution, though not absolutely necessary.

The bracketed wire splint is now well padded with oakum and adjusted to the limb, the foot being secured to the foot-board by broad, adhesive strips and bandages, and the limb above and below the knee also fixed to the splint by the same means; after which the wound is dressed with oiled lint, protected with waxed paper or oiled silk; this again with a pad of oakum, and the whole surrounded with turns of a roller.

Scirrhus of Breast—Removal.

Case 2.—This woman, 31 years of age, has a tumor of the left breast. It is most prominent above and to the outer side of the nipple, but involves the whole gland. The glands of the axilla are also enlarged and infiltrated. The skin is adherent to the tumor, which presents the appearance of a scirrhus or hard cancer, an affection which is rarely met with at so early an age.

We will remove here the entire breast, as well as the infiltrated axillary glands. Two curved incisions are made to include the adherent portions of skin, and from the centre of the wound thus made a V-shaped cut is carried downward so as to embrace the nipple. The flaps thus formed are laid backward, fully exposing the tumor, which is then readily removed, principally by tearing. The axilla is next explored, and all the glands that can be reached are enucleated with the finger and handle of the scalpel. The wound is then painted over with a fifteen-grain solution of chloride of zinc; any vessels that bleed should be tied as they are divided, and the edges brought together with sutures and supported with adhesive plaster. Drainage tubes should be arranged so as to allow the escape of fluids from the deep parts of the wound. A simple dressing of oiled lint is applied, covered with oiled silk and kept in position with a pad of oakum or cotton and a roller bandage.

Congestion of the lungs is a complication to be guarded against after breast excisions, being sometimes caused by the exposure of the chest necessarily incident to the operation. To avoid the risks of heart-clot—the pathological condition found in cases of so-called secondary shock—we will give both this patient and the one last operated upon carbonate of ammonium in five-grain doses, every two hours, until to-morrow.

Medical Societies.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, Nov. 23d, 1882. The President, Dr. Jas. Tyson, in the chair.

Great Hypertrophy of the Heart, due to Severe Valvular Lesions.

Presented by Dr. M. O'Hara.

J. H., male, æt. 30 years, laborer, contracted syphilis when 18 years of age. Health good until within past three years, when he began to suffer from pains in the left breast, palpitation of the heart, and slight dyspnœa, after violent exertion. Gradually becoming worse and unable to work, he was admitted into St. Mary's Hospital in June, 1882. He then complained of great pain over the upper part of the sternum, in the left arm and shoulder. He lost considerably in weight, his appetite was poor, and albumen was present in small proportion in his urine, although casts were absent. He had marked dyspnœa on admission, which increased rapidly until sleep could only be obtained in the upright position. There was no evidence of pulmonary trouble. With the forearms flexed to a right angle, the brachial arteries became prominent at each impulse of the heart; the pulsation of the carotids was wavy and prolonged; the

temporals were tortuous and visibly pulsated; no retinal arterial pulsation was seen. Retinal venous pulse was marked, but no visible venous pulsation was detected elsewhere. The left præcordial region was specially prominent. The apex beat was most distinct in the sixth and seventh interspaces on a perpendicular line running mid-way between the left nipple and anterior border of the left axilla. The heart's impulse was usually forcible and diffused, but at times it became weakened and wavy. In the second left intercostal space a systolic impulse was observed. The pulse varied from 80 to 120 per minute, struck the finger with considerable force, but at once lost most of its volume. All these phenomena were exaggerated by raising the hands above the head. The radial pulses were unequal, but the brachial arteries presented no differences. No hepatic pulsation was felt. The cardiac area of complete dullness was nearly twice its normal size, the increase being downward and to the left. Over the second right costo-sternal articulation, the closure of the aortic valves was distinctly heard, and with this a slight diastolic murmur. A systolic murmur was also heard over the same spot. The systolic murmur was nearly lost in the carotid and sub-clavian arteries, but the diastolic one remained distinct. On a line with the second costal cartilage, over the sternum, and to the left of this bone, the diastolic and systolic basic murmurs were most intense. Over the cartilage of the left fourth rib, the murmurs heard at the base of the heart were less distinct, or were obscured by the development of other murmurs. In this situation, a short, sharp, presystolic murmur, apparently prolonged into a systolic one, was detected. At the apex, and just above it, the systolic murmur became intensified, its blowing character aiding in differentiating it from the short, harsh murmurs which immediately preceded it. From the fourth to the seventh rib, and from the sternum to a point about five or six inches to the left, a diastolic murmur of considerable intensity was heard. The character of the diastolic murmur over this area was different from that presented by the second sound murmur at the base of the heart, and its intensity was much greater. Posteriorly at the lower angle of the left scapula, a blowing systolic murmur, entirely deprived of its harsh presystolic complication, was heard. Dr. Eskridge thought the physical signs justified him in venturing the diagnosis of constriction and regurgitation at the mitral orifice, a rare form of mitral regurgitation, produced by the inability of one of the aortic semi-lunar valves to close while the others acted properly; great hypertrophic dilatation of the left ventricle, and to a less extent of the left auricle; and aneurismal dilatation of one of the great vessels, probably of the pulmonary artery near its origin from the heart. The patient rapidly sank. Œdema of the feet, lower portion of the trunk and lower extremities, with hydrops pericardii pleuræ and of the peritoneum, developed. He died, exhausted, in August, nearly two months after admission to the hospital.

Sectio cadaveris.—Brain: Some venous congestion of the pia mater. The brain substance and the ganglia nearly normal in appearance. Thorax: The pericardium was nearly filled with serum. The only evidences of inflammation were a few patches of recent lymph at the left anterior upper portion of the sac. The heart weighed eighteen ounces, the increased weight being chiefly due to eccentric hypertrophy of the left auricle and ventricle. The right ventricle was dilated, with slightly thickened walls. The aortic valves were insufficient and thickened. The posterior leaflet was normal in shape, but the others curled upon themselves on the aortic side of the orifice. The stenosis was slight. The mitral orifice was button hole shaped and the valves failed to close, on account of calcareous deposits in their tissues, this degeneration also involving the inner surface of the left side of the auricle contiguous to the valves. The auricular surface of the valves was fairly smooth, but in the ventricle just beyond the valves, and attached to them, hung a bony substance about one-eighth of an inch in diameter. The left auricular appendix was much hypertrophied. The valves at the tricuspid and pulmonary orifices were normal. The pulmonary artery was considerably dilated. The pleural cavities contained several ounces of serum. There were old adhesions at the apex of the right lung posteriorly, and at the same spot of the left lung anteriorly. Several patches of recent lymph were also found at the lower part of the left pleural cavity. Abdomen: The peritoneal cavity contained considerable serum, and its veins were engorged. The liver was enlarged, with distended veins. The kidneys were highly congested. The spleen was double its normal size and softened.

Abscess of the Liver Following Arrested Menstrual Discharge, from Exposure to Cold; Pyæmic Abscesses of the Lungs and Spleen; Perforation of the Bowel; Severe Heart Complications; Death During the Seventh Week.

Presented by Dr. J. T. Eskridge.

M. D., aged 28 years, was a factory girl whose father and two sisters had died from heart disease. She had had two attacks of inflammatory rheumatism but had never complained of heart trouble. Her fatal illness began at night, by arrested menstrual flow, and severe cramping abdominal pains, coming on after exposure to cold during the previous afternoon. Fever and pain in the right lower side of the abdomen continued for three days, when she was able to work again for about a week. Jaundice began early, was well marked during the first three weeks, was slight afterward, but lasted until her death. Her symptoms three weeks after the beginning of the attack, when admitted into St. Mary's Hospital, in Dr. Hickman's wards, were, great prostration, emaciation, loss of appetite, pain in the right inguinal and lumbar regions, and irregularly recurring chilly sensations. Two weeks later, when first seen by Dr. Eskridge, the liver dullness extended nearly to the anterior superior process of the ilium, and the normal tympanitic note of the right inguinal region of the abdomen was replaced by one bordering on dullness. The tenderness was so great that neither fluctuation nor a tumor could be detected, if such existed.

Great tympany soon developed and obscured the physical signs. A pyæmic condition, from which the patient perished in about two weeks, set in, attended by chills, fever, sweating, low temperature, and diarrhœa. A few days before death she passed considerable pus by the bowels. The surface temperature, taken over the chest and abdomen, showed the latter to be about two degrees warmer than the former, but all parts of the abdomen were nearly the same temperature. Stenosis of the aortic and mitral orifices, with insufficiency of the valves of the latter, and a dilated hypertrophy of the left auricle and ventricle, were recognized during life. The post-mortem examination revealed the diagnosed lesions of the heart, and demonstrated the possibility of visible left auricular pulsation; the liver weighed eighty ounces (the right lobe being alone enlarged), and contained a large abscess, surrounded by several smaller ones, with which it was connected. The cæcum and its appendix were surrounded by about six ounces of pus, the latter being circumscribed by adhesions. Two openings were found in the black and gangrenous cæcum, one where its appendix had sloughed off, the other due to perforation of the bowel by the pus. The portion of the liver external to the hepatic abscess was firmly adherent to the abdominal wall, and from this point (about two inches above the crest of the ilium) the pus had burrowed its way and formed a sinus leading to the right inguinal region, under Poupart's ligament. A direct communication between the liver abscess and the accumulation of pus surrounding the cæcum was seen.

Dr. Eskridge thought that the demonstration of the possibility of visible left auricular pulsation in the second left intercostal space, and of the occurrence of a functional murmur in the pulmonary artery, without dilatation of that vessel, was worthy of notice at present, as Dr. Broadbent had so recently advocated views almost diametrically opposite. Dr. Eskridge considered mitral stenosis of not infrequent occurrence, and said, with care, the mitral presystolic murmur was not usually difficult to detect. The four physicians, including himself, present at the autopsy, then thought that the hepatic abscess was secondary to the inflammation and suppuration around the appendix and cæcum, but he, after carefully analyzing the clinical evidence and pathological lesions in favor of each condition, was satisfied that the case began as one of primary abscess of the liver, following exposure to cold while the patient was menstruating.

The discussion on both these preceding specimens, which presented somewhat similar heart lesions, was now opened by Dr. J. B. Wilson, who said that there was one point of special clinical interest in Dr. Eskridge's case, viz., the chronology of the lesions. He thought that the extensive multiple abscesses of the liver and lungs were secondary to the abscess around the caput coli. In some cases the determination of the primary source of the emboli was difficult, but in this case it was perfectly clear.

Dr. Bruen said that he would like to go on record among those who had observed auricular pulsation in cases of mitral obstruction, in which the stenosis was extreme.

Dr. Nancrede remarked that in his experience flexion of the thigh or the abdomen was an almost invariable early symptom in cases of perityphlitis, from which he would infer that as this thigh flexion did not occur in Dr. Eskridge's case until within ten days of the fatal termination of the case, the peri-cæcal abscess was secondary to that in the liver.

Dr. Tyson said that he had been much impressed with the marked increase of the surface, temperature in the neighborhood of the abdominal abscesses as compared with the general body temperature; as to the chronology of the various affections, he was inclined to believe that Dr. Wilson was correct.

Dr. Eskridge said, in reply to Dr. Wilson, that he could appreciate how the perityphlitis might be mistaken for the primary trouble, and the hepatic suppuration for the secondary; such a mistake (for he felt certain that the abscess of the liver was the primary affection), was made by all, including himself, who were present at the post-mortem examination. The pathological and clinical facts in favor of primary hepatic abscess were given at some length in his remarks in connection with the presentation of the specimens. In brief, the clinical features were as follows: Deep and early jaundice following exposure to cold, pain in the right side of the abdomen, attended by fever and gastric irritability of a few days' duration; an intermission of a week, during which she was able to work, followed, after which gradually increasing weakness with dull abdominal pain, attended by loss of flesh and appetite, confined her to bed; ten days before death the development of intense tympany associated with flexion of the right thigh upon the abdomen. The hepatic suppuration was confined to the right side of the right lobe, all the smaller abscesses directly communicating with the large one, and the left lobe of the liver being apparently healthy.

Tongue and Larynx from a Case of Elephantiasis Græcorium.

Presented by Dr. A. C. W. Beecher.

The case from which these specimens were removed was reported in the *Photographic Review of Medicine and Surgery*, No. 6, Vol. 1, Aug., 1871.

M., aged 26 years, born in Cuba, of Spanish parents, married. His father was living when the patient died, in 1872; the mother died when he was an infant. He was wet-nursed by a colored house-servant, who was unmarried, but had had several children by different individuals. She was healthy as far as known, with the exception of sores upon her feet. He had none of the diseases of early life except measles and mumps. His health was good up to 15 years of age, when superficial, yellowish-pink spots appeared upon his body, accompanied by neither pain nor itching. They remained about one year, and disappeared during a voyage to Spain. While there he was attacked with neuralgia of the little fingers, extending along the course of the ulnar nerve to the elbow, which was relieved, and he returned to the West Indies. Six months after his return he experienced a second attack, which lasted for one month. In 1862 he came to this

country to study, and, after one year, became the subject of repeated catarrhs, chiefly affecting the throat. Itching of both forearms and legs soon after developed. In 1866 œdema of the hands and feet, which did not extend beyond the wrist or ankle, set in, producing a sensation of stiffness of the fingers and toes. Blebs then suddenly appeared in varying size upon the dorsum of the hands and fingers, extending over the whole length of the latter. At times a sharp pain in the hands and fingers, arousing him from sleep, would herald one of these bullous attacks. The bullæ contained a whitish, opaque fluid, and, when burst, were succeeded by dark-brown scabs, transversely cracked and fissured over the joints. Under these crusts were excavated ulcers. The finger tips and the ends of the toes presented similar ulcers, over which the nails grew, and these latter, being brittle, broke off when long. Next, frequent hemorrhages from the nose, coming on while laughing or in mental or physical excitement, were noted. The nose became tender, was much swollen, and discharged moderately offensive pus, and the bridge of the nose began to sink, gradually assuming its present appearance [a photograph was here shown]. A year after the hands were attacked the face became similarly affected, the ulcers, on healing, leaving distinct cicatrices. The eruption never entirely ceased, new bullæ and ulcers forming while others healed. There was marked emaciation. The hair was absent in many spots on the body, and was everywhere scanty, and the skin was of a dusky hue. The muscles of the arms were much wasted, and the skin presented small white cicatrices. Over both patella and olecranon processes, large, hard, firm, reddish nodules were seen. The hands were much deformed, with wasted, contracted fingers, having numerous small, hard tubercles scattered beneath the skin of the dorsal surface of the hands. Numerous ulcers, mostly covered with irregular black scabs, cover the back of the fingers. A markedly varicose condition of the veins near the wrist was observed. The hair of the head was normal in quantity but was hard and harsh, while there was total loss of eyelashes and eyebrows, and the beard was scanty. There was a large, hard tubercle over one frontal bone, near which was an old ulcer. The nose was much sunken; there was an ulcer over the right zygoma, covered by a black, rupial-like scab; the face was marked with scars, and the ears were likewise deformed with traces of numerous cicatrices. Many of the teeth were decayed and broken off close to the gums. The tongue was much thickened with greatly enlarged papillæ. The velum palati was almost gone, from ulceration, and yellowish-white tubercles existed in the pillars of the fauces. The larynx was much contracted by thickening of its mucous membrane. The epiglottis was about twice its normal thickness and had several well marked tubercles upon it. The voice was merely impaired, weak, and had a peculiar husky sound. There were deep sloughing ulcers over each tendo-achillis. Tactile sense was very much impaired, as on the dorsum of the hands, where the sense of touch was almost absent, and what was recognized was referred to some point in the neighborhood of the point of contact. The sense of pain was almost entirely absent in the hands and forearms, becoming more marked as the body was approached; a pin passed through the pulp of the middle finger gave absolutely no pain. The difference between very hot water and that of an ordinary temperature was readily perceived, moreover, there was general increased cutaneous sensibility to temperature changes. Taste and smell somewhat impaired. Very slight anæsthesia of the trunk exists. Sight was good, although prolonged use of the eyes was painful. The general health of the patient was fair. There seemed to be no trace of venereal disease. Sexual power was absent. Frequent neuralgic pains of the legs and arms were complained of. The atrophy of the hands, feet, fingers and toes was appreciable from month to month. The cornea next became ulcerated, the conjunctival surfaces became adherent, and almost total blindness ensued. Swallowing was almost impossible toward the last, owing to the pain produced by the throat ulcers, and because of imperfect closure of the rima glottidis fragments of food entered the larynx, producing violent and exhaustive coughing. Respiration was also so much impeded that he died Oct. 29th, 1872, partly from dyspnœa, partly from starvation. Up to the death he suffered intensely.

Autopsy.—Rigor mortis well marked. Great emaciation of the entire body noted. The surface of the tongue was fissured, the papillæ enlarged, with the remains of tubercles well marked toward its base. The epiglottis was curved on its long diameter, thickened and stiff, with its upper margin eroded by a large ulcer. A deep ulcer was situated in the mucous membrane, near the apex of the left greater cornua of the hyoid bone. Narrowing, from thickening of tissues, involved the trachea at its upper part, and produced such stenosis of the chink of the glottis, that an ordinary quill could not be passed between the vocal cords. Upon section of both ulnar nerves near the elbow, extensive degeneration was detected. This case was examined both by Dr. Duhring and Dr. R. M. Bertolet, the latter making a laryngoscopic examination, who both considered it to be of the mixed variety, viz., tubercular and anæsthetic leprosy. The case is interesting, both from its rarity and the possibility of other cases being brought here from California and New Brunswick, in both of which places it is not uncommon. Again, its resemblance to syphilis at first led me into error, although, said Dr. Beecher, I recognized something strange about the disease. The late Dr. Maury saw the case with me, and had no doubt of its syphilitic nature until Dr. Duhring's examination convinced him that it was really leprous. Erasmus Wilson says, "The resemblance to secondary syphilis is so striking that an error is certain, excepting on the part of those who have had an opportunity of seeing and observing leprosy."

Dr. Wilson asked whether the family history had been investigated. Dr. Beecher replied that he had carefully questioned all concerned, but had ascertained nothing special, except that when such cases occurred in wealthy families, the fact was always hushed up. Dr. Wilson said

that in this connection he would call the attention of the members to a very able article in the last issue of *Hay's Journal*, where the writer took the view that leprosy was contagious, maintaining that it should be investigated where it was of rare and recent occurrence. Dr. Wilson also referred to its occurrence among recent immigrants in certain of our northwestern States. Dr. Carl Seiler said that Dr. Beecher had asked him to examine the specimens of the larynx and tongue of the case of elephantiasis. The dorsum of the tongue was deeply furred, and the papillæ appeared enlarged. The epiglottis was thickened, very stiff, and rolled on its long axis, like a dry leaf. On its upper free margin was a crescented ulcer with raised edges, and numerous smaller roundish ulcers were scattered over the laryngeal surface of the epiglottis. Extensive ulceration of both ventricular bands and vocal cords existed, so that the opening of the ventricles was almost entirely occluded. The ulcers were symmetrical, and most marked toward the anterior insertion of the vocal cords. About one-quarter of an inch below the cords was a cicatricial band projecting from the sides of the subglottic cavity, and leaving an elliptical opening through which a crow quill could hardly be passed. Below this obstruction the mucous membrane of the subglottic cavity was studded with small round ulcers, while the trachea seemed healthy. No further lesions could be detected by the naked eye, although, doubtless, such had existed but had been obscured, owing to long preservation in alcohol. Dr. Seiler regretted the absence of the records of the laryngoscopic examinations made before the patient's death; still, the lesions seen in the speculum would explain the symptoms of dyspnœa, aphonia and dysphagia, and it was astonishing how the patient could have respired at all through the narrow opening left by the cicatricial tissue below the glottis. The chief interest, however, centered in the great similarity of the lesions in this unique case with those found in syphilis and lupus of the larynx. He had seen ulcerations in syphilitic laryngitis almost identical in shape and location with those seen in the specimen, and he remembered having seen two or three specimens of lupus of the larynx when in Vienna, which bore a strong resemblance to syphilis. Lupus and leprosy of the larynx could not be diagnosed from one another by laryngoscopic examination alone, but other signs and symptoms outside of the larynx had to aid in the diagnosis. Thus in a syphilitic laryngitis there were always sharply defined bands of a deep red color on the free margin of the velum palati. The lupus affections of the skin of some parts of the body always preceded, coexisted with, or shortly followed the manifestations of the disease in the larynx, while in leprosy the larynx was usually attacked later in the disease, when other portions of the body clearly showed marks of the pest.

Dr. Little remarked, that having conversed with Dr. F. H. Enders, who had seen a great many cases of leprosy in the Sandwich Islands, he had been interested to note that the eyelids were affected in the early stages, ectropion resulting, and the conjunctiva and cornea, or even the whole eyeball becoming involved. The affection of the eyelid is sometimes the first symptom, or occurs during the first or second year of the disease. The lids were involved in the case described, and the eyeball subsequently.

Dilatation and Atheroma of the Pulmonary Artery, with an Opening Through the Intraventricular Septum.

Presented by Dr. Bruen.

Examination of the Heart.—Left side: Slight ventricular hypertrophy; mitral valves somewhat thickened at the margins, with roughening of their auricular aspect; valves competent; the left auricle is normal, as is also the aorta and the aortic valves. Examination of the right is of most interest. Two of the semilunar leaflets of the mouth of the pulmonary artery are nearly destroyed by atheromatous changes, the third segment is much thickened and projects as a leaf-like fold, roughening the mouth of the pulmonary artery. This vessel is dilated to twice its normal size, forming really an aneurismal dilatation. The vessel walls are covered with a fringe of vegetations, of inflammatory origin, or due to atheromatous changes. The right auricle is very small and imperfectly developed, the bulk of its cavity being formed by the auricular appendix. The tricuspid valves are much thickened but are competent probably. Between the two ventricles is an orifice large enough to admit the forefinger. It is directly beneath one of the two tricuspid leaflets, and is lined with endocardium, and must have allowed a free interchange between the blood of the two ventricles. The walls of the right ventricle are thinned and its cavity somewhat dilated. Dr. Bruen said that this case was interesting, because perforation of the ventricle or septum is often congenital and dependent on obstruction of the orifice of the pulmonary artery, the perforation being due to the pressure of blood within the replete right ventricle. This pressure causes an arrest in the development of the ventricular septum. The pathology of the present case probably is as given above, but there was no pulmonary artery obstruction. A similar case is recorded in the *Medico-Chirurg. Trans.*, vol. xv., by Fletcher. (2). There was no cyanosis. Cyanosis is usually dependent on a deficiency of cardiac evolution, or else on retarded evolution of the pulmonary artery or aorta. As a consequence there is deficient cardiac power to carry on the circulation; or the pulmonary artery or the aorta are narrower than normal, so that in any of these conditions venous repletion results and cyanosis; mixture of the venous and arterial blood is not, then, a usual cause of cyanosis, although it may be a factor. Walsh says, "Grant that perforation of the ventricular septum coexists with constriction of the pulmonary orifice, and cyanosis seems to become a certainty." In our case there is an example of incomplete development of the ventricular septum and deficient development of the right auricle, without cyanosis. (3) Pulmonary artery disease is consistent with a fair amount of general health, and that compensation by the right heart may occur, just as in cases of aortic disease. (4). Descriptions of pulmonary artery disease call attention to bronchitis, pneumonia,

hydrothorax, as sequential states. In our case no such complications were present until just before death, when she finally succumbed to congestion of the lungs added to the cardiac state. (5). The aneurism of the pulmonary artery formed a pulsating tumor on the left side of the sternum, between the second and fourth ribs, extending outward from the border of the sternum and including an area covered by a trade dollar. (6). Over the tumor a post-diastolic and a presystolic, bruit-like murmur could be heard, at a point between the second and fourth ribs, while close to their junction with the sternum a hoarse systolic murmur could be heard. The bruit was localized, the heart systolic murmur was carried out into the entire arterial system.

Dr. Bruen then detailed at length the differential diagnosis of these murmurs. During life dilatation of the pulmonary artery, with mitral obstruction, had been the diagnosis. The patient was a woman, aged 24 years, a syphilitic, and was under observation from Nov., 1878, to July, 1882.

Dr. Eskridge had not had any difficulty in differentiating a presystolic from a diastolic murmur. He thought the leathery thickening of the mitral valves, in the specimen presented by Dr. Bruen, was sufficient to give rise to a mitral presystolic murmur. If we adopt the theory of Dr. Austin Flint, Sr., that a mitral presystolic murmur may occur in aortic regurgitation when the mitral valves are perfectly healthy, it seemed to him that there was no difficulty in accounting for the presystolic murmur, from the regurgitant blood from the pulmonary artery into the communicating right and left ventricles of this case, especially as thickening, loss of elasticity, and some rigidity of mitral valves existed. The chronometry of the pulsations that occurred in the left second intercostal space, he thought could have been obtained by adopting Sansom's modification of Balfour's method of comparing the time of the occurrence of præcordial pulsation.

Dr. Shakespeare said that he had been struck with one point of great interest in connection with inflammation of the lining coats of the pulmonary artery, as evinced by the vegetations. These growths are very rarely found in the venous current. He had certainly never seen any other specimen, although he did not doubt that some had been seen or reported by other observers. Arterial blood seemed a requisite for the evolution of such diseased action. Evidently the site of the perforation being just below the aortic and pulmonary valves, brought about just this necessary pre-requisite, viz., abundance of arterial blood with the venous.

Dr. Wilson called attention to the evident relation between the incomplete ventricular septum and the condition of the pulmonary artery, which is greatly dilated and atheromatous, and presents the appearance often met with in the aorta, very rarely in this vessel. The wall of the right heart is relatively thickened. This fact, together with the position of the opening in the inter ventricular wall, which favors the flow of the blood from the left ventricle toward the pulmonary artery, renders it probably almost certain that the more forcible contraction of the left heart has constantly forced a portion of its arterial blood into the right heart, thus increasing the current entering the pulmonary artery and occasioning, 1st, hypertrophy of the right ventricle, and 2d, a sub-acute inflammatory process in the pulmonary artery itself, in consequence of the increased volume and force of the blood current. Dr. Shakspeare's observation that such growths as are here seen require for their existence arterial blood, is in accordance with this view.

Sarcoma of the Prostate Gland.

Presented by Dr. W. E. Hughes.

The specimen which I have the pleasure of presenting to you this evening was taken from a patient in the University Hospital, under the care of Dr. F. R. Wharton.

W. C., aged 35 years, admitted to the University Hospital suffering from retention of urine. Before his admission numerous unsuccessful attempts had been made to empty the bladder by means of a catheter. On admission the patient complained of much pain in the hypogastric region, which was the seat of a smooth, rounded swelling, reaching almost to the umbilicus. He stated that he had gonorrhœa some years previously, which had been followed by a troublesome stricture, which had been perfectly relieved by the passage of bougies. For more than a year previous to his admission he had suffered at irregular intervals, from difficulty in urination. The urine had never been bloody, but its passage had often been attended by great pain. It was found impossible, on account of numerous false passages, to introduce a catheter into the bladder. On introducing a finger into the rectum the prostate was felt smooth, rounded and immensely enlarged. The patient was put to bed, ordered suppositories of belladonna and opium, and to have a warm poultice applied to the abdomen. This treatment relieved him almost immediately, and urination became freer. For a few days he did well, but the difficulty in urination soon began to increase, and by the fifth day after his admission the symptoms had become so urgent that it was deemed advisable to repeat the attempt to pass the catheter. This attempt was as futile as the first. Then aspiration of the bladder through the abdominal walls was attempted, but only a small quantity of blood was obtained. In introducing the canula it gave the sensation of passing into a solid body, and careful palpation revealed the fact that there really was a solid body apparently occupying the whole bladder. It was now decided to open the urethra at the base of the bladder, through the perineum, and the operation, known as Cock's was selected. The operation was followed by the escape of a small amount of urine. After this the patient did well, with the exception of an attack of dysentery, until the ninth day after the operation, when peritonitis suddenly developed. He died on the following day.

Autopsy (two hours after death).—Upon opening the abdomen, a thick, yellowish-red, purulent liquid, having a urinous odor, was found, bathing the intestines, the walls of which were everywhere bound together by recent adhesions. The omentum was in places firmly adherent to the intestines, and

contained numerous, irregular, nodulated masses, varying in size from that of a pea to that of a hen's egg. These masses, on section, presented a whitish-yellow color. In the lower part of the abdominal cavity was a large, irregularly shaped tumor, firmly adherent to the small intestines, colon, omentum, and walls of the pelvis. On careful dissection the tumor was found to originate in the prostate gland. On section it presented, in parts, the characteristics of schirrus, in others, those of encephaloid. No trace of normal prostate gland, nor seminal vesicles could be discovered. The bladder, containing a few ounces of urine, was found in front of the upper portion of the growth, its upper boundary almost on a line with the umbilicus. Its anterior wall was apparently perfectly normal, its posterior wall, resting on the tumor, was thickened, raised, red and velvety. The ureters were normal, and opened in the usual position. The urethra, as far as could be seen, ran along the anterior surface of the tumor, and was not involved by it. The weight of the growth was five pounds, two ounces. The kidneys, stomach, lungs and intestines were normal. The peritoneum and capsules of the liver and spleen contained several secondary growths. The brain was not examined. Microscopic examination showed the growths to be a typical, small, round-celled sarcoma. The secondary deposits were similar in structure to the primary growth. The sub-mucous and muscular tissues of the bladder wall were somewhat infiltrated. The growths in the capsules of the liver and spleen had commenced to penetrate those organs.

Melanotic Sarcoma of Orbit, with Metastases to Liver, etc.

Presented by Dr. Shakespeare.

The patient was an elderly woman, who had been operated upon by Dr. Heyl, at the Episcopal Hospital, some six months before death, the whole contents of the orbit having been then thoroughly removed. Recurrence took place, the cavity being filled with a black, fungating mass; the left nostril gave vent to a blackish discharge, and the various internal organs became involved, notably the liver. Death took place from exhaustion. Most of the metastases are entirely melanotic, but some in the liver show, at their periphery a distinct, whitish zone. Dr. Shakespeare remarked upon the singular fact that orbital growths were usually melanotic, although they might not spring from the choroid coat of the eye, as in this case, where all pigmental structures had been removed many months ago.

Editorial Department.

Periscope.

Gastrostomy.

The Paris correspondent of the *Lancet* thus writes concerning this very interesting case:—

A cursory mention was made in the *Lancet* of Dr. Felizet's case of gastrostomy. The patient is now convalescent, and I will now complete the account of this case by a description of the operation and the subsequent treatment. Peter Genisca, for such is the name of this spoon-swallower, is a young Swiss of nineteen years of age. On the night of Sunday, Sept. 10th, he was amusing the customers of the *café*, where he was employed, by introducing a long spoon, such as is used for stirring coffee when served in glasses, into the œsophagus, pushing it as far down as he could and then withdrawing it. The performance was brought to an abrupt ending by the spoon slipping out of his fingers and disappearing down the alimentary canal. The following morning he was seen at the hospital by M. Felizet. Palpation revealed the existence of a foreign body, which projected in the left hypochondrium. Pressure upon this spot was painful, and caused a pricking sensation below the liver. The patient complained also of a feeling of constriction in the epigastrium, of difficulty of breathing, and of a painful sensation with each movement of the diaphragm. There was a constant flow of saliva and mucus from the mouth. Opium and ice were given to allay the pain, but in spite of this no sleep could be obtained, and bilious vomiting set in. This symptom, together with the patient's anxiety and suffering, decided M. Felizet to operate. In order to lessen the chance of the escape of any liquids from the stomach into the peritoneum, and to manipulate the abdominal organs as little as possible, the following plan was devised: A small india rubber tube was introduced through one nostril into the stomach. The outside extremity terminated in a Y-shaped branch, upon one division of which was a funnel, while the other was in communication by means of a tube with a recipient, containing ether. To begin with, the stomach was washed out by pouring a solution of bicarbonate of soda into the funnel, and then depressing the end of the tube below the level of that organ, so as to act as a syphon. The patient was then brought under chloroform, and the operation continued with antiseptic precautions. An incision was made, seven centimetres long, parallel to and one and a half centimetres below the edge of the false ribs, extending from the line of hepatic dullness, three centimetres below and external to the xiphoid appendix, to a point on the left side, on a level with the junction of the ninth and tenth costal cartilages. The sheath of the rectus and some of its fibres were divided, and the peritoneum exposed. Hemorrhage having been entirely arrested by torsion and ligature, the recipient containing ether was plunged into a vessel of water at 60° Centigrade, and the stomach at once became distended by the vapor, and the peritoneum, being divided upon a director, protruded through the wound. Ten sutures in all were then made to fix the stomach to the abdominal wall, the ether being allowed to escape, in order to ascertain whether the juxtaposition of the surface was

complete. One spot appearing defective the stomach was distended again, and another suture inserted. An incision, six centimetres in length, was then made in the axis of the wound. After the vapor had escaped, the stomach was found to be perfectly clean and empty. The spoon was felt, lying transversely across the stomach, with one end in the pylorus and the other in the greater curvature; it was then extracted without difficulty. After the operation the patient was kept under the influence of morphia by small hypodermic injections. Tea and rum were given as a drink, with small pieces of ice. Antiseptic dressings were applied. The after effects of the operation were not serious. There was no fever or tenderness of the abdomen. The most distressing symptom was great thirst, but this was relieved most satisfactorily by enemata of cold water. Notwithstanding the dressings, the liquids swallowed passed through the wound. On the fourteenth day a little milk was given, but this oozed through the dressings, and was not renewed. On the fifteenth some meat was tried, but caused uneasiness. On the first of October a considerable portion of the wound had healed, and all that remains is a fistulous opening, closed by a pad. The patient eats meat, vegetables and pastry.

Foreign Bodies Swallowed.

At a recent meeting of the Boston Society for Medical Observation (Boston *Med. and Surg. Jour.*) Dr. Reynolds introduced the subject of swallowing foreign bodies, and said: The profession possesses in its classical treatises accounts of an endless variety of foreign bodies that have passed in safety through the alimentary canal. When, however, unusually large or very ill-shaped bodies are to encounter the delicate structures of the intestine in very young subjects, the attendant often finds it hard to put once more unlimited confidence in the natural powers. It is, therefore, perhaps, not unwise to place on record any such instances.

A girl of eight years, holding between her lips a smooth, oblong stone, as large as the last phalanx of an adult thumb, suddenly threw herself back on the floor, and in so doing swallowed the stone. The enemy was voided at stool between forty and fifty hours later. The child ate heartily after the accident, took no medicine, and suffered neither pain nor disturbance of health. Unfortunately the stone cannot be exhibited, as the nurse, thoughtlessly, threw it away. It was, however, well known, and was easily recognized.

Dr. H. I. Bowditch related a case in which a little girl, three years old, swallowed a leaden button. The parents, being much alarmed, gave her, with the consent of a physician, a dose of castor oil. Afterward nothing special was done, and at the end of a week the button was passed from the anus without suffering. Dr. Bowditch said that in his opinion the oil was unnecessary. Certainly repeated dosing, from the liability to produce ill health, should be avoided. A plenty of substantial, rather loosening food, so as to keep the bowels easily and normally opened, was better. Bullets often lie in various parts of the body, and are harmless. Why, then, be alarmed in such a case as the above?

Dr. Brown said it was bad practice to give cathartics or watery substances in such cases. The aim should be to solidify the fæces so as to envelop the object, and milk would be a good diet for this purpose.

Dr. Ingalls reported a case in which a man had swallowed a peach stone. It had come as far as the rectum, but could not be passed further. As it was too high to be reached with the finger, the patient was etherized, and the stone was extracted by the aid of forceps.

Dr. Bush said that it was the custom with persons who attempted to pass spurious coin to swallow them, often, to avoid detection. In such cases their diet was composed of hard-boiled eggs, they having found by experience that this diet rendered the foreign body harmless, by enveloping it in a coat, and in about three days the coin would be found in the fæces.

Dr. Fitz said that if the junction of the pharynx with the œsophagus was the narrowest part of the alimentary canal, anything which will pass this point will pass through the other parts without trouble. Hence if a body of good shape has been actually swallowed, no alarm need be felt.

Lesions of the Teeth in Locomotor Ataxy.

The *Medical Times and Gazette* says: At the meeting of the French Association for the Advancement of Science, on August 30th, a communication was made by M. Th. David, upon lesions of the teeth in locomotor ataxy. The paper was based upon the observation of a single case, and the following are the most important of the conclusions arrived at from an attentive study of it: The alteration consisted of a rapid decay of the anterior part of the crown of almost all the teeth. The altered substance assumed the consistence of touchwood and a reddish color. The enamel still retained its polish, but not its hardness. Beneath those parts the pulp had produced a new layer of secondary dentine, and in most of the front teeth the pulp cavity was filled up. These alterations had nothing in common with caries, and must be referred to nutritive disturbance resulting from the lesion of the central nervous system. The changes are analogous to those which have already been observed to take place in the nails in the course of locomotor ataxy; they would thus establish a pathological relationship between organs already connected by a common epithelial origin. Locally, these alterations recognize for their immediate cause a functional disturbance or a lesion of the dental pulp. The atrophy which has been shown to exist would be quite comparable to that which is observed in the eye under similar circumstances. Whence the final conclusion that we must attribute to the dental pulp the physiological significance of a sensory organ.

—Dr. Sharp, of Salem. has in his possession a deed signed by William Penn. in February, 1672. It is in a good state of preservation.

THE

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OF

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THE SURGEON GENERAL'S REPORT.

The Annual Report of the Surgeon General U. S. A., places the average mean strength of our army at 20,778 white, 2265 colored, and 245 Indian troops. The total number of cases on the sick list was, among the whites 1679 per thousand, among the colored 1810 per thousand.

Of the whites the average number constantly on sick report during the year was 45 per thousand of mean strength, whereas among the colored troops it was 44 per thousand—the difference being unappreciable.

The deaths among the white troops were at the annual rate of 10 per thousand, of whom 7 per thousand died of disease, and 3 per thousand of wounds, accidents or injuries. The colored soldiers died at the annual rate of 11 per thousand, of which number 7 died of disease and four of wounds.

Of Bureau work it is stated that during the past fiscal year 2693 Monthly Reports of Sick and Wounded have been received from the medical officers in charge of the various posts and stations. These have been examined, consolidated on statistical sheets for use, and the deaths and discharges entered in the appropriate alphabetical registers. 955 Reports of the Medical Examination of Recruits were received and filed, and 823 Monthly Meteorological Reports were received from medical officers and transmitted to the Chief Signal Officer of the Army, for his use.

The work in the Record and Pension Division continues something enormous. Not less than 61,630 official demands for information as to the cause of death in the case of deceased soldiers and the hospital record of invalids was made upon this department! This was nearly 7000 in excess of the previous year. There are now pending in the office over 83,000 of such inquiries, waiting to be disposed of! In connection with this subject the Surgeon General makes a significant observation, in these words:—

"I would also refer in this connection to a progressive increase in the difficulty of search for record of the hospital treatment of soldiers who served in the late war. As time elapses

claimants appear to be more than ever unable to furnish definite information concerning the date and place of their treatment. There is much evidence at hand to establish the fact that this difficulty does not arise from defective memory alone. It is to be regretted that there is too often a manifest failure on the part of those preparing declarations for pensions in pressing inquiries upon these important points, as it is the cause of much of the delay hitherto charged to this office."

In speaking of the library, the Report very justly urges that no advantage would accrue from merging this library with any other; its size and importance, and the demands made upon it being such as to require the services of a specially skilled medical officer to make it as useful as it should be, and to preserve for it the interest of the medical profession of the country, to which much of its completeness is due.

The third surgical volume of the History of the War is ready in manuscript, and will be laid before Congress promptly. The Museum, during the year, was visited by 13,250 persons, giving strong testimony to the value in which it is held. A strong appeal is made that its unequaled collections shall have erected for their conservation a fire-proof building. It is justly urged that this collection has attained a world-wide celebrity; is second to none in the number and value of specimens illustrating military surgery and the diseases of armies, while its sphere of practical usefulness to the medical profession of the country is unlimited. It is therefore hoped that Congress may be induced to appreciate its great value and importance, and provide for the fire-proof building required to place the collections beyond the chance of loss or injury.

Notices of the deaths of medical officers and their army records are added.

The Report is a satisfactory one in every respect, and is convincing testimony of the efficiency and scientific training of the medical staff of our army. Its recommendations should receive the early and favorable attention of the Congressional committees. So little intelligent interest, however, has been manifested by the present Congress in medical and sanitary matters that we are not sanguine as to its action.

THE MANUFACTURE OF DYNAMITE.

On the coast of Ayrshire, a few miles south of Ardrossan, are located the works of the British Dynamite Company. Though not in any way offensive, as regards bad odors, nor inimical to health, nor injurious to either animal or vegetable life, yet they are located one mile from the nearest village, no doubt with a view of reducing the loss of life in the event of an explosion, though so perfect are the police regulations of the place itself, that the danger is almost nil.

Some two hundred and fifty men and women are employed in the works, and when they enter the gates in the morning, they become virtually prisoners for the day; but their healthy, contented faces and cheery voices give ample evidence that they like the work and do not fret at their volutary confinement.

The day's work is commenced by all hands changing their ordinary clothing, for a uniform, differing for each gang, and each distinctive of the special work to be performed by this particular gang.

This uniform plays an important part in the safety precautions of the establishment.

Realizing that accidents usually occur in dangerous occupations, on account of some one undertaking to do something with which he is not thoroughly familiar, the management have adopted these distinctive uniforms (in one instance bright red), so that the police can tell at a glance whether any one is out of his or her province.

Four men from the county police force, paid by the company, are constantly patrolling the premises (which cover an area of a square mile), and they can neither speak nor be spoken to.

The superintendent is a man intimately acquainted with all the theoretical and practical aspects of the question of manufacture, besides which, at irregular and uncertain intervals a government official visits the place to see that the Acts of Parliament relative to the manufacture of dynamite are faithfully carried out.

The process followed in the manufacture is based on the discovery of Mr. Noble, that by the use of an inert substance the power of the

explosive is not lessened, while the risk attending its application is reduced.

The substance used is a porous, silicious earth, resembling flour, into which nitro-glycerine is poured and by it absorbed, when the compound is passed through various processes, each with a view of lessening the danger of handling. It is then made up into cartridges of various lengths and power. The cartridge material divested of the agency of a detonator may be handled and subjected to percussion without explosion.

There are limits as to the quantity which may be sent out at any one time, and there are rules laid down for the arrangement no less than for the size of the cases holding the material. That it is a profitable undertaking in which the company are engaged is apparent from the high premium on the original shares; and that their product has become a "resource of civilization" is shown by the demand for it from every part of the globe where man, warring with nature, is uprooting the stumps of trees that hinder the progress of his plow, leveling the rock that comes between him and a straight path, unloosening from its firm foundation the stone that is to build his house, breaking into the seam of the coal that is to cook his dinner, or making deep and navigable the stream that gives him communication with his neighbor.

THE AMERICAN vs. THE EUROPEAN PROFESSION.

In reading the foreign journals one cannot but be struck by the frequency with which he encounters reports of remarkable operations and clinical histories of peculiar phases of disease, as compared with similar reports in our own medical periodicals.

We have often reflected on this, and wondered at the cause.

The body of an American is formed on the same principles, and subject to the same pathological and physiological laws as that of the European; it is but reasonable, then, to suppose that it would be affected by the same injurious agencies in the same morbid manner.

We have in this country a large number of persons, and a great army of physicians; the same diseased conditions must obtain, and the necessity for similar surgical procedures must exist.

Why then is it that in English journals we read of nephrotomy and nephrectomy, of gastrotomy and œsophagotomy, of removal of the larynx and the like.

Why do we find reported cases of "acute traumatic malignancy;" why do we read lectures on "the pre-cancerous stage of cancer," and innumerable other odd and singular phases of diseased condition, evidencing, as they do, acute observation of facts and accurate generalization from them.

Our profession, as a body, will compare favorably with that of any nation in the world. We have original thinkers, accurate observers, and broad generalizers. We are not any more conservative than our brethren of other countries.

Why, then, is it that we do not read in our journals similar cases to those reported in the medical press of England, for instance?

We imagine that the explanation is to be found in the fact that the physicians of this country do not thoroughly realize the importance of the medical press, and, therefore, do not cultivate it as they should.

This is one reason; this is why we do not read more practical clinical reports of unusual cases; and the unfortunate habit of looking to older countries for innovations in practice makes us hesitate to try new operations until their utility has been demonstrated for us.

There are some American physicians who write too much, but the great majority do not write enough.

Medical journals are the vehicles of interchange of thought and experience between the members of the profession, and a physician should make it a rule always to report every case that may occur in his practice in which any phenomena may present themselves that he does not find recorded in his text-books.

But he should be short and explicit. Many an otherwise good communication has been rendered worthless by being too *long-winded*; the

valuable points have been smothered in a lot of trash.

When a man feels sure that he has something *new* to report, he should reflect how he can say what he has to say in as few words as possible. He will thus prepare an article that will be readable as well as valuable, and will not encroach unnecessarily on the too limited space of a good journal.

Physicians should likewise cultivate the habit of independent thought and reasoning in their practice, and should not, as so many do, practice strictly according to the rules laid down in books.

Short, practical communications are always of value, and the profession of our country should make it a rule to prepare them frequently.

Notes and Comments.

Etiology of Hemorrhagic Smallpox.

At the recent scientific Congrès at Rochelle, M. L. H. Petit made a very important communication on the etiology of hemorrhagic variola. He considers that the visceral lesions found in this form of variola are rather the causes than the effects of the hemorrhagic variety of the disease. The same might also be said for other malign forms of this and other diseases.

But distinction must be made between old lesions (diverse forms of degeneration, steatosis, sclerosis, etc.) and those of more recent origin (interstitial hemorrhage). The general lesions, whether causing or themselves caused by the general morbid condition of the system, act on smallpox just as they do in traumatic lesions, that is, through the modifications induced in the blood and tissues, particularly in the capillaries. Among the subjects predisposed to the hemorrhagic variety of smallpox might be ranged those who have before suffered from affections of the spleen, heart, kidneys, etc., or from diseases capable of inducing alterations in these viscera, such as rheumatism, scarlatina, malarial affections, alcoholism, etc. It is for this reason that the prognosis is much less favorable in patients presenting these morbid conditions. In the discussion which followed, M. Verneuil remarked that regarding the malignity of maladies two elements should always be considered: 1st, the intensity of the poison, and 2d, the vital resistance of the subject attacked. It has been remarked by M. Leudet, that the frequency of the hemorrhagic variety is not more marked during an epidemic than at other times, and he thence concluded that in the development of this form of variola the condition of the subject plays a more important part than the intensity of the poison.

Ovariotomy in Italy.

In the *Raccoglitore Medico*, of the 20th of July, Dr. Peruzzi publishes a note on the third hundred cases of ovariotomy in Italy. He shows that while nineteen years were taken up to complete the first series of one hundred cases, the second only took two years and a half, and the third twenty-three months. The third series was performed by forty-six operators, of whom twenty-eight only had one case each; seven had only two each; and Dr. Margary, of Turin, who had the largest number of cases, only eight. The result was seventy-three recoveries and twenty-six deaths. In the second hundred, there were thirty-six deaths, and in the first sixty-one; a very satisfactory proof that as experience has increased mortality has diminished. Of incomplete or partial operations, during the progress of the last hundred completed operations, there were nine, with five recoveries and four deaths. Of removal of uterine tumor, classed together as supra-vaginal laparo-hysterotomy, there were twenty-seven cases, with only seven recoveries to twenty deaths.

Cardiac Form of Typhoid Fever.

At the Congrès at Rochelle, M. Bernheim, of Nancy, read an interesting memoir on this subject. Under the above designation he places those cases in which, without notable organic alteration of the heart itself or any pulmonary complication of sufficient gravity to explain the fact, the pulse becomes small, very frequent and depressible, and the patient succumbs under this paralytic acceleration of the action of the heart, which may occur at the debut of the malady, either with or without concomitant nervous adynamia, or at a more or less advanced period of its evolution.

In such cases the temperature is not very high; it may be normal or even hypo-normal. M. Bernheim is of opinion that this state of asystole of nervous origin is due to the direct action of the poison or typic microbe, on the centre of cardiac innervation.

Generally in typhoid fever the pulse is less frequent than in other febrile conditions, as if the typic poison, like digitalis, had a slowing-up action on the heart; it may then be possible

that the poison, when too concentrated, should have the same action on the heart as a toxic dose of digitalis producing a paralytic acceleration of its action.

This theory would explain the fact, noted by M. Bernheim, that digitalis in such cases is not only inefficacious but dangerous, and that given even in preventive doses it does not prevent the manifestation of the cardiac form of the disease.

Finally, sudden death in certain cases of typhoid fever, where no appreciable alteration of the heart can be found at the autopsy, may be due to the sudden concentration of the poison on the cardiac centre.

Caution About a Popular Toothache Remedy.

A formula frequently used to relieve toothache, is the following:—

℞. Spts. chloroformi,
" Æth. sulph.,
" Camph.,
Tr. opii,
" iodinii, āā f℥j.

A pledget of cotton saturated with this mixture is placed in the hollow of the aching tooth. It was tried once by Dr. Charles H. Miller, of Peabody, Kansas, who reports the case in the *Southern Clinic*, in a stout young girl of 18, who used the remedy several times, and finally went into a stupor, from which it took many hours of hard work to arouse her. He, therefore, cautions against prescribing it too liberally or too carelessly, especially where the patient will be left in entire and undisputed possession.

Quinoline (Quinoléine).

The principal physiological effects of this newly discovered medicament are: 1st. Notable fall of temperature (Donath, von Jaksch, Black and Loiman). 2d. Gastric derangement (nausea and vomiting), ringing in the ears, etc. In a toxic dose there is frequency of respiration, diminution, and finally abolition of reflex excitability, followed by complete paralysis and death (often with œdema and hyperæmia of the lungs). Quinoline and its salts have antiseptic properties. It would seem to serve in certain cases as a substitute for quinine, and is much less costly.

The tartrate and the chlorhydrate of quinoléine have been used hypodermically. The chlorhydrate in hypodermic injection is apt to induce local irritation, according to von Jaksch, who introduced four grains at a dose. The tartrate is preferable for hypodermic use; it is soluble in water and alcohol, and does not often produce local accidents.

The hypodermic dose for the adult is from five to fifteen grains.

The salts of quinoléine have been employed with variable results in intermittent fever, neuralgia, typhoid fever, whooping cough, pneumonia, erysipelas, septicæmia, etc. Further researches and clinical experimentation will be required before the therapeutic value of the drug can be accurately determined.

Tincture of Iron and Chlorate of Potash in Scarlet Fever.

In the Glasgow *Medical Journal*, Dr. John S. Main furnishes additional evidence of the good effects of the tincture of the perchloride of iron and chlorate of potash, which he generally combined with glycerine. The chlorate of potash should be dissolved in hot water, as it is very insoluble in cold.

The theory of this medicine in scarlet fever has been very well described in an article in the *Lancet*, of 20th of August, 1878, by Dr. Renfrew. He describes it thus: "This mixture contains chlorine, hydrochloric acid, iron and chlorate of potash. The acid supplies acid to the blood, which is in a sub-acid condition; the iron improves the red discs, which are in a black and melanosed state; the chlorate of potash supplies oxygen to assist in oxydizing the disintegrated material in the blood, where it floats freely."

Eyelashes in Anterior Chamber of Eye.

In the *Lancet*, Mr. Williamson tells of a boy, aged 8, who was stabbed in the eye with a pocket knife; when seen, two weeks afterward, there was but slight inflammation and very little increase of vascularity in the ciliary region. On the front of the cornea, in the area of the pupil, there was a cicatrix, and inside the anterior chamber were what appeared to be six or seven hairs, lying vertically. Mr. Williamson made an incision at the upper part of the cornea, and excised a piece of the iris. The hairs were then drawn out with a pair of fine forceps; one hair that escaped the forceps was caught by a Tyrrell's hook. All went on well after the operation, and the lad has now good sight with the injured eye.

Under the microscope the hairs were found to taper to a point at one end, and to have a root at the other. They were about the length of the eyelashes. The lid was carefully examined for a gap in the line of lashes, but none was found. Probably the knife was a blunt one, and caught the lashes about the middle, doubling them up and drawing them out by the roots. They would

then be carried on the end of the blade into the anterior chamber, remaining there when the knife was withdrawn.

It is remarkable that the hairs caused so little irritation, although some of them actually pierced the iris.

Traumatic Stenosis of Trachea.

At a recent meeting of the Medical Society of the County of Albany, Dr. N. L. Snow (*Annals*) reported the case of a stout, hearty man, who was caught between two cars. The point injured was the upper part of the chest, which was excoriated, and there was flattening on the right side, with undue prominence on the left. Anodynes afforded relief. He was chiefly troubled with dyspnœa. This would trouble him in paroxysms, but always yielded to anodynes and hot fomentation. On the twenty-ninth day great dyspnœa supervened, from which he died the next morning. At the autopsy, a stricture of the trachea was found, situated about one and a half inches above the bifurcation.

Tympanites in cases of Fibroid Tumors of the Uterus.

Distressing tympanites, remarks M. Chéron, in the *Jour. de Med. de Paris*, is frequently observed in cases where rather large uterine fibroids exercise more or less pressure on the rectum.

In such cases, very frequently, the usual remedial agents are of no benefit, and prepared charcoal and chalk, magnesia and carminatives do not relieve the symptoms. When such is the case, M. Chéron pursues the following course of treatment: 1st. Complete suppression of wine and every form of alcohol. Water or some of the mineral waters at meals. 2d. To take four times daily a tablespoonful of the following lotion:—

℞.	Tr. valerian,	℥ ss	
	Syr. ætheris (Fr Cod.)	℥ iss	
	Aq. menth. piperit,	℥ j	
	Aq. destill.	℥ iv.	M.

3d. Rub in, night and morning, over the abdominal region a part about as large as a nut of the following ointment:—

℞.	Ext. bryon,	℥ j	
	Ung. simpl.	℥ j.	M.

Under the influence of this treatment, after a few days there is a notable diminution in the distressing symptoms.

The amelioration will be rarely durable, as the cause always exists, but by careful attention to diet, the use of mineral waters, etc., considerable relief may almost always be obtained.

Ulcerations of the Pharynx in Phthisis.

We read in the Paris *Médical*, that M. Schiffern relates a case where cure of a tuberculous ulceration at the arytenoid region was obtained by the insufflation of finely pulverized iodoform.

This was done by means of a rubber ball, similar to those on ordinary syringes, attached to a tube of caoutchouc. The author made two or three insufflations daily, each time of 30 centigrams (gr. v) of iodoform.

The medicament seems to form a thick covering over the ulcer and is not dislodged by coughing.

When the ulcerations are situated on the epiglottis he applies the following, with a camel's-hair pencil:—

℞.	Iodoform,	℥ ss–℥ iss	
	Collodion,	℥ ss.	M.

He avoids the peculiar odor of iodoform by placing fragments of tonka bean in the bottle which contains it.

Absorption by the Skin.

At a recent meeting of the Académie, M. Aubert read an important memoir on this subject, arriving at the following conclusions:—

1st. Substances dissolved in water may penetrate the epidermis without apparent external erosion. 2d. Nevertheless, the one condition essential to the accomplishment of this penetration appears to be an epidermic effraction about the hair follicles. 3d. In his experiments he has found that the penetration of dissolved substances takes place only over the regions covered with hair. 4th. All conditions which induce traction on the hairs, such as friction, etc., favor absorption. 5th. Fine skin and a thin epidermis are rather unfavorable conditions, on account of the feeble hair development in these regions; the total absence of hair is also a very unfavorable condition as regards absorption. 6th. It is possible that a small proportion of any soluble substance may penetrate the epidermis, and this means of absorption may be utilized by baths or without. To bring about absorption it will be necessary, both before and during the time the substance is in contact with the skin, to make prolonged frictions with the palm of the hand over the cutaneous surface, especially over regions covered with hair. The only inconvenience attending such practice is very moderate inflammation and a slight degree of redness, generally localized at the points where the hairs emerge. 7th. The simple bath, without friction, even prolonged (for two hours in several cases), cannot be depended on to induce the absorption of the smallest particle of the substance in solution.

Diagnostic Importance of Rectal Examination in Stone of the Bladder.

R. Volkmann, who made the above subject a special study, advises, that with relaxed abdominal walls, under deep narcosis, especially in slim individuals of youthful age, while introducing one finger into the rectum and applying the palmar surface of the right hand to the abdomen, the stone should be pushed up to the pubic bone and held here with the latter hand. He says it were then easily possible to grasp it perfectly, and he actually demonstrated the fact to his students, a number of whom he permitted to get hold of the stone. (*Arch. f. Chirurg.*, 1882, No. 11.) If the stone is not too large, it can be lifted up with the soft parts, and so high that it could be tied with a ligature, a fact which V. mentions, not to recommend it as an operation for stone, but to be made use of in movable cystic tumors, as in cases of papillomata with long pedicle, or in cases of myoma, which could well be extirpated in such a manner.

Miners' Nystagmus.

The *Med. Times and Gaz.* says that M. Dransart has lately read a paper on this subject. His conclusions are that the disease is due to a paresis of the organs concerned in the elevation of the eyes (both muscles and nerves), resulting from fatigue of the elevators, caused by the nature of the work (in low galleries, etc.); that it is independent of any central nervous lesion, and that it is curable.

A Case of Septicæmia.

Dr. G. Stanley Murray reports, in the *Lancet*, the case of a young man, aged 27, who died with all the symptoms of septicæmia, after having had twenty-two decayed teeth removed within three days. He had a tendency to phthisis, and was much enfeebled before the teeth were removed.

CORRESPONDENCE.

Sixteen Grains of Sulphate of Morphia Taken at One Time—Recovery.

ED. MED. AND SURG. REPORTER:—

On November 9th, 1882, at 10 A. M., I was called in consultation with Dr. Yingling, of Huntington, Ind., to see Miss Eva S., aged 28, domestic, who had been found lying on the ground in the rear of the house, in an unconscious condition.

As she was evidently profoundly narcotized, and had frequently threatened to "put herself out of the way," we concluded we had no child's play in the case, if we would thwart her intent. Concluding she had taken the "morphine route," and as she could not swallow, and as we had no time to lose, we gave her hypodermically fld. ext. belladonna, gtt. v, and carb. ammonia, gr. iij (sulph. atropia was not at hand). The pupils dilated slightly and respiration and circulation were somewhat improved, and at the expiration of two hours we repeated the injection. This caused a very marked improvement of all the symptoms, and our patient was so far recovered as to be able to take her treatment per orem. This consisted of the belladonna and ammonia, to which was added a very strong infusion of coffee. These remedies were used for forty-eight hours, when she was convalescent and further attendance discontinued. I should have stated that a saline cathartic was given as soon as it could be swallowed, and acted promptly. On Nov. 20th she called at my office, and from her I learned the following:—

1st. She had never taken opium or any of its preparations before the date above named.

2d. The quantity taken was sixteen grains of morphia sulph., at a single dose.

3d. Time of taking dose, 9 P. M., Nov. 8.

4th. She had eaten a very light supper four hours before.

5th. She did not vomit after taking the drug, nor take anything to counteract its effects.

6th. She did not become fully conscious until ten days after.

That she should have recovered, under all the circumstances, appears to me quite remarkable.

WM. C. CHAFEE, M.D.

Huntington, Ind., Nov. 21st, 1882.

Death During Parturition.

ED. MED. AND SURG. REPORTER:—

A singular, sudden and sad death occurred in our village on Sept. 27th, 1882, which I ask you to please publish in your "Correspondence Column." Late in the evening of Sept. 26th, Mrs. G., of this place, a small, weakly woman, aged 28, was taken in her sixth confinement. All her previous labors were of a tedious nature, especially the fifth, which she got through with the greatest difficulty, and since which time had had several attacks of hemorrhage of the lungs. Saw patient about 7 A.M. of 26th; found the os uteri but slightly dilated, though indications bid fair for a safe delivery; in a few hours the waters were prematurely discharged, *i. e.*, without dilatation. And here came the "tug of war." Found the left hand by side of vertex, engaging the small unyielding os; delivery by version, the usual way, was now the alternative; succeeded in introducing index finger; feet could be touched, but, failing to introduce the hand into the internal cavity, on account of the contracted condition, they could not be grasped until several hours of valuable time had elapsed. But even then, by every manipulation, the feet (or foot) could not be brought down; the fundus uteri remaining high in the epigastrium, and so firm the resistance, that I had some thoughts of a plural birth. With every effort toward version there was considerable hemorrhage, and on account of faintness and cold extremities, I was forced to desist from further manipulation; ergot was freely administered, and all means of artificial heat applied; hemorrhage was promptly

arrested, but pulse small and rapid, and whole surface bathed in a cold perspiration ; gave frequent doses of quinine and brandy with the ergot, kept back the protruding member, and let the head engage the superior strait, hoping to sustain the powers of life, and anxiously looking for reaction ; child not perceptibly viable at any time ; pains had almost entirely ceased since first hemorrhage was noticed. After utilizing almost every instrument in my possession, as a dilator to the unyielding os, preparatory to using forceps, I decided to give the patient an hour's rest, hoping thereby to be rewarded by more strength and better pains. She, however, rallied but little. At about 7 P.M. I applied forceps, although the os uteri was but little dilated ; fœtus seemed immovable, and patient was passing from one fainting spell into another, until I withheld further effort, but continued the ergot, quinine, artificial heat, etc. ; chloroform had been given before forceps were applied. Dr. Bridwell being called in consultation, used skillful manipulation, applied forceps, etc., but patient again sank, followed by syncope, collapse, and died at 11.20 P.M., of 27th.

Post-mortem.—A very large child, extracted by Cæsarean operation ; hemorrhage had filled and greatly distended uterine cavity ; fundus reaching the diaphragm. The death in such cases cannot be attributable to the length of time, nor to the severity of the labor, as we, not unfrequently, have had labor lasting forty-eight hours, without serious results. Primarily, the cause may be due to general debility, while the immediate cause of death must have been uterine hemorrhage.

Fortunately such cases are of very rare occurrence.

W. H. Dowden, M.D.

Owensburgh, Ind.

The Action of Iodide of Potassium.

Ed. Med. and Surg. Reporter :—

In The Reporter for Nov. 11th, Dr. F. Shimonek, of Beaver Dam, Wis., relates a peculiar and unexpected result following the administration of 6 gr. of potassium iodide to a lady patient. To my mind, the reliability of the preparations manufactured by such chemists as Powers & Weightman preclude the probability of the results being due to any impurity in the preparation employed. Eliminating this question, *what was the cause of death* in this instance?

My explanation is not original, but based on the researches of Buchheim, and recorded by Bartholow, in the 2d edition of his "Materia Medica and Therapeutics" (p. 178). It is to the effect that at the points of elimination from the free mucous surfaces, chemical changes occur, resulting first in *ozone* being set free. The ozone now attacks the salt, decomposing it and freeing its *iodine*.

According to this explanation, inflammation of the mucous surfaces was produced, which in turn produced such an effect upon the nervous system as to bring about spasm of the glottis, which, in conjunction with an inflammatory condition of the broncho-pulmonary mucous membrane, accounted for the dyspnœa. As the drug is eliminated very rapidly (being detected in the saliva and in the urine in 15 minutes), I think the suddenness of the symptoms are thereby explained. The fact that former administrations produced somewhat similar symptoms would seem to indicate that at the time of the administration of the last dose the nervous system was in condition to readily respond to the action of the remedy ; in other words, that the final action may have presented itself in less time than would be necessary for the elimination of the iodide. I should be pleased to hear from others on this subject, especially as to the influence of the peculiar nervous system in such instances.

Poughkeepsie, N. Y. H. R. Powell, M.D.

Some Interesting and Unpleasant Cases in Practice.

ASPIRATION OF BLADDER—ENLARGED PROSTATE—DEATH.

Ed. Med. and Surg. Reporter :—

A man over 50 years of age, suffering from retention of urine from enlarged prostate, came under observation. Different forms of prostatic catheters, including the soft rubber, were used, but without effect. When the catheter was introduced it was firmly grasped by the prostatic urethra, and on withdrawal the eyes of the instrument were found filled with blood. These two facts, viz., immobility of the catheter when introduced deeply, together with bleeding on withdrawal gave rise to strong presumption of a false passage. It was then decided to aspirate in order to relieve the patient of his most urgent symptom.

Potain's instrument was employed, and on withdrawal suction was kept up to prevent any urine escaping from the needle into the cellular tissue. On the following day the catheter was again employed, but without success, and aspiration was again performed. Symptoms of peritonitis set in shortly afterwards, and on the following day the patient died. The autopsy showed a very much enlarged prostate, but no evidences of a false passage were noticed. There was no sign of peritonitis around the needle punctures, and very slight evidences of inflammation in any part of the peritoneal cavity. The bladder contained only a few ounces. There was no extravasation of urine. The case was interesting and painfully unpleasant and unsatisfactory in its termination. The autopsy unfortunately did not throw much light on it.

Shortly after this case was seen, another one, of enlarged prostate, with retention, came under observation. Several attempts were made to pass the catheter, but, as in the case recorded, the instrument was firmly held by the prostate, and on withdrawal the eyes were filled with blood. A final attempt was made and considerable force used, when the catheter passed the obstruction, and the anxious patient was gratified by a copious flow of urine.

These two cases are of more than common interest in regard to the treatment of retention of urine in cases of enlarged prostate, and the inference is that it is better to use a certain amount of force, at the risk of making a false passage, than to expose the patient to the dangers coincident to a distended bladder.

PUZZLING CASE OF INCARCERATED HERNIA—OPERATION—DEATH.

A man, 35 years of age, was seen after he had been suffering for a few days from what was supposed to be strangulated hernia. The patient gave the usual history of constipation and abdominal pain. An examination showed a peculiar swelling in the inguinal canal, not unlike what might be expected from hydrocele of the spermatic cord. It was not hard, and the finger could pass up the inguinal canal. It was considered best, on account of the urgency of the patient's condition, to operate and explore the canal. In doing so there was found to be a partially strangulated or incarcerated hernia at the left internal abdominal ring. The puzzling condition of the canal was due to fluid, the result of the hernia. The patient died shortly after the operation.

SOME OF THE DIFFICULTIES IN ASPIRATION OF THE CHEST.

A man, aged 70, suffered from chronic bronchitis and subsequently from pleurisy and empyema on the right side. Surgical interference was not attempted till the dyspnœa became oppressive. He was then aspirated, and about two quarts of foul smelling pus removed. Great relief followed the operation, and the patient was allowed to rest for a few days, when he was again aspirated to relieve the distress of breathing. On the afternoon of the same day it was decided to make a permanent opening and wash out the pleura. The usual incision was made at the point of aspiration, but no pus obtained. Another incision was made lower down and the precaution made to carry it pretty far into the chest, but still not a drop of pus was found. On the following day a swelling appeared below the chest wall, on the same side, but as the patient was moribund, no exploration was attempted. Unfortunately, no autopsy was held.

There are some pertinent questions which readily suggest themselves, such as the whereabouts of the fluid, inasmuch as only a limited amount was removed on the morning of the operation. The facts, unsatisfactory though they be, are respectfully submitted to the readers of the REPORTER, with the hope of bringing forward some suggestion.

One thing that painfully impressed itself on my mind was, do not aspirate shortly before making a permanent opening in the chest wall.

J. S. B.

NEWS AND MISCELLANY.

Artificial Food for Infants.

Infants ought properly to be raised on mother's milk, and nothing else, for the first year of their life. All mothers, however, do not survive childbirth; others have no milk; others have diseased breasts; and there are other good excuses, as well as a lot of poor ones, why mothers don't and can't nurse their infants. Some artificial food is therefore necessary. One to which our attention has been especially called is the Anglo Swiss Milk Food. It is prepared at Cham, Switzerland, by the Anglo-Swiss Condensed Milk Company, and has the endorsement of a large number of practitioners who have tried it. Any of our readers who give it a fair trial will gladly be heard from through our columns, as our object is to give every such preparation its full and just praise, and no more.

Resurrectionists.

We have been lately regaled with a great sensation about the stealing of bodies from cemeteries for the purposes of dissection in medical colleges.

We have purposely refrained from making any allusion to the same at an earlier date, in order that we might speak calmly and unexcitedly of the affair. The course of events seems to indicate, as we had supposed at the first, that there are wheels within wheels, in this, as in most other sensations, and while we join with every right-minded man in denouncing the spoliation of graves, we reserve a final opinion on this *old and often used* sensation until we can tell all about it.

New Century Lectures.

Under the auspices of the Franklin Institute, a course of lectures with the above title is now being delivered. The first, by Miss Mary Hobart, of Boston, had for its subject, "How to Wash and Dress a Baby." The second was on "Cooking for the Sick." We most heartily commend these lectures. They are still further evidence of the interest that is gradually developing in this country in all that pertains directly or indirectly towards preventive medicine or hygiene.

It is well that the public should be taught how great is the power of proper washing, dressing and cooking in the maintenance of health.

Diphtheria in Schools.

A very severe epidemic of diphtheria has broken out in the town of Hamilton, N. Y. Two institutions of education are located there, and in one of them several deaths have occurred. The Faculty are debating the question of closing the institution. Their duty is plain. They should at once close the school and send away all scholars not sick. When the last case has died or recovered, the institution should receive a thorough disinfection, first chemically, and subsequently by means of an abundance of soap and water and pure air, when the exercises can be safely resumed.

A Conscienceless Physician.

A prominent physician of Aiken county, S. C., was arrested on the 5th inst. on the charge of having committed a diabolical crime against his own wife. The infuriated populace proceeded to the jail and threatened lynch law, but were dissuaded from their purpose. We trust this wretch will receive the full punishment prescribed by law, if, indeed, he be guilty of the alleged act.

The Preparation of Tea.

The Board of Health of Kauagawa, Kem, have published a report, in which they condemn the preparation of tea as an unhealthy occupation. The dust arising from the process was one cause of danger, but the principal evil was found in the large proportion of carbonic acid in the atmosphere, amounting in the worst cases to as much as 2.73 parts per 1000 of air. This is caused by the charcoal fires used in the process, and its evil effects are very manifest in the livid appearance of the face and body of the worker.

"The Annals of Anatomy and Surgery."

The December issue of this journal closes its third year of existence. Though young, it is a remarkably vigorous production. Devoted to the subjects of anatomy and surgery, its advent filled a long existing void in medical journalism, and we trust it may have a long and prosperous future.

Items.

—The *Medical Summary* is much improved in the appearance of its cover.

—The State Sanitary Convention of New Jersey will meet at Trenton on the 14th and 15th of December.

—A man died recently in the Glasgow Infirmary, from hydrophobia resulting from the bite of a rabid dog on March 14th last.

—Dr. John A. Octerlony has been elected to the chair of Materia Medica, Therapeutics and Clinical Medicine in the University of Louisville.

—The family of a laborer, in San Francisco, were poisoned recently "by eating fish." Two children are dead, and another not expected to recover.

—The munificent legacy of $100,000 has been bequeathed to the Salop Infirmary, England, by the late Mr. Henry Spence, merchant, of Shrewsbury, who died recently.

—Dr. Alexander Ogston, Surgeon to the Aberdeen Royal Infirmary, has been appointed to the Chair of Surgery in the University of Aberdeen, in succession to Dr. Pirrie, who resigned some time ago.

—The following announcement was posted the other day in the Baltimore City Hospital: "If any gentleman has purchased a skeleton within the past few days he will confer a favor on Dr. Thomas by letting him know of whom he purchased it, for there has been one taken from the hospital. A reward will be paid and the gentleman allowed to keep the skeleton."

OBITUARY NOTICES.

DR. ALEXANDER N. DOUGHERTY,

a distinguished physician, and also a prominent local politician in Newark, New Jersey, died, Nov. 28th, of apoplexy, at the age of 60 years. He was a Corps Surgeon during the war, and is said to have attended General Hancock when he was wounded at Gettysburg.

DR. JOHN D. M. CARR,

a well-known physician, and one of the most advanced Masons in the United States, died recently, in Chicago, after a protracted illness.

DR. HUGO. KUENSTLER,

a German physician, well known in Harlem, who lived at No. 240 East One Hundred and Fifth street, died suddenly, on Sunday evening, Nov. 26th, while attending a patient. Dr. Kuenstler was 35 years of age and a native of Berlin. He had been in this country for eighteen years. He was graduated from the College of Physicians and Surgeons in 1871.

QUERIES AND REPLIES.

H. L. C., Groveport.—Such a case as you describe could not, with propriety, be termed "Pyæmia." A more correct designation would be "traumatic fever."

MARRIAGES.

BARHAM—NICHOLS.—At church, in Mt. Enterprise, Texas, by the Rev. J. S. Mathis, Sunday, Nov. 19th, 1882, Mrs. M. Nichols and S. H. Barham, M.D.

BRANNAN—DANA.—On Thursday, Nov. 9th, at the residence of the bride's parents, by the Rev. A. B. Hart, D.D., Dr. John Winters Brannan, of Colorado Springs, and Eunice, daughter of Charles A. Dana, of New York.

BULLOCK—ELLIS.—In Crosswicks, N. J., Nov. 5th, by Rev. A. G. Thomas, Lawrence M. Bullock, M.D., of Upland, and Miss Rebecca, daughter of the late Henry G. Ellis, of Crosswicks.

CROTHERS—CHRISTIE.—In West Nottingham, Md., October 25th, by Rev. S. A. Gayley, R. R. Crothers, M.D., and Fannie S. Christie, both of Rowlandsville, Md.

FROETZ—ROEDER.—On October 26th, 1882, at the residence of the bride's parents, by Rev. Dr. C. Z. Weiser, Dr. Oliver H. Fretz, of Salfordville, Montgomery county, and Miss Elmira N., eldest daughter of Nathan C. Roeder, of Spinnerstown, Bucks county, Pa.

JAMIESON—TRAPAGEN.—Wednesday, Nov. 8th, at Trinity Chapel, by Rev. Cornelius E. Swope, Dr. John Jamieson and Annie L. Trapagen, daughter of the late John E. Trapagen.

LATHAM—STRYKER.—On Wednesday, Nov. 15th, by the Rev. A. P. Stockwell, at the Reformed Church, Gravesend, Miss Frances M. Stryker and James R. Latham, M.D., of New York.

MARKLEY—PENROSE.—On Nov. 16th, at the Hotel Lafayette, in the presence of the Mayor of the city of Philadelphia, Dr. Arthur D. Markley, of Hatboro', Montgomery county, Pa., and Miss Hannah J. Penrose.

MILLIKIN—SCOTT.—On Thanksgiving day, Nov. 30th, 1882, at the residence of the bride's mother, by Rev. W. S. Danley, of Carmichaels, Pa., assisted by Rev. J. B. Baird, of Rice's Landing, Pa., John L. Millikin, M.D., of Carmichaels, Pa., foster son of W. S. Throckmorton, A.M., M.D., of Nineveh, Pa., and Miss Annie L. Scott, of Jefferson, Pa.

SMITH—BROWN.—On Tuesday, October 31st, by Rev. E. Greenwald, D.D., Amos H Smith, M.D., of Paradise, Pa., and Ida Brown, of Harrisburg, Pa.

TAYLOR—SHARPLESS.—On Nov. 19th, by the Rev. Charles Morison, at the residence of the bride's mother, Edward Winslow Taylor, M.D., and Lillie H., daughter of the late Charles L. Sharpless.

WORKMAN—GRIMES.—On Thursday, November 2d, 1882, by Rev. J. G. Lyle, of Wheeling, W. Va., at the home of the bride's parents, Uniontown, O., John C. Workman, M.D., and Miss Jennie M. Grimes.

DEATHS.

MULFORD.—In the city of Camden, N. J., suddenly, on Nov. 21st, Isaac B. Mulford, M.D., in the 40th year of his age.

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Communications.

CLINICAL STUDIES OF INEBRIETY—RATIONAL METHODS OF TREATMENT.

BY T. D. CROTHERS,

Superintendent of Walnut Lodge, Hartford, Conn.

In the rational treatment of inebriety, the first thing is the removal of all exciting causes. In a certain proportion of cases, alcohol is only a minor cause. It is an error to suppose that inebriety always depends upon the use of alcohol, and that its absolute removal will be followed by recovery.

The exciting causes which must be withdrawn are both complex and varied, only to be ascertained from a careful study of each case. In some instances these causes may be found in want of proper exercise, indigestion and irregularities of living, or in diseased conditions coming from overwork, underwork, or exhaustion from want of rest, sleep, etc. Many of these are physical, for instance, the sight of a man intoxicated, or stories of drinking, in which the pleasures and miseries are portrayed at length; or the efforts of a temperance lecturer, who in his attempts to alarm the hearer provokes the opposite feeling in an increased thirst for spirits. In my experience, extravagant descriptions of the sorrows from drink, and passionate appeals to stop, which is the burden of the reformed lectures, are often exciting causes and dangerous influences to a certain class of inebriates. On several occasions I have yielded to the entreaty of temperance people, and permitted lecturers to harangue my patients on the evils of inebriety, but always with bad results, invariably exciting, and in some cases stimulating, the old impulse to drink, perhaps by a reaction from the emotional excitement produced. Inebriates are always nerve exhausted and emotionally diseased; a reflex of the surroundings generally, feeling every change as keenly as the mercury responds to the state of the atmosphere. The exciting causes may be said to include everything which exhausts or unduly stimulates the weakened nervous system. The desire for alcohol is only an expression of this condition, which, from the experience of the patient, can be relieved only by spirits. These causes must be ascertained from a careful clinical study, and no permanent results can be expected unless the means of treatment are based on such knowledge. A common illustration is that of a man whose domestic relations are unhappy. His friends repeatedly upbraiding and scolding him for excesses in drink, threatening severe measures and means if he will not stop, and in this way rousing irritative emotions that react in cravings for spirits to relieve this feeling. Such cases find in the asylum freedom from these exciting causes, as well as abstinence from alcohol.

In another case, of a clerk who works, and is closely confined for many hours, living irregularly, eating, sleeping and using alcohol originally to quiet the protests of a starved organism. To him an asylum would be a relief from these irregularities, and the desire for alcohol dies out as these causes are removed. In both of these cases the surroundings of an asylum may be

greatly inferior to their accustomed homes, and possibly the removal from alcohol may not be absolute, and yet they recover, because the principal exciting causes are removed. If alcohol was the only exciting cause, the station house, the jail, or any room with locks and bars that would keep out spirits would be sufficient.

An asylum should be literally a quarantine, where every external exciting cause could be effectually taken away, and every condition of surroundings and circumstances that shall build up a healthy brain and nerve power gathered and applied.

If inebriety was a disease of some special organs, curative means might be found in certain remedies and particular forms of medication, which in a majority of cases would be successful. Experience shows that inebriety is the most complex of diseases, affecting all the organs of the body, requiring medication which influences the entire organism.

To effectually take away the exciting and predisposing influences, the patient must be placed in new surroundings, where all the mental and physical influences can be governed and controlled. The surroundings must be adapted to his special wants, where food, exercise, sleep, rest and enjoyment may be regulated so as to secure the greatest benefit from them.

Every hygienic means that shall build up the body and mind, together with medical skill, are requisite. These conditions cannot be obtained except in a special asylum or hospital, and no rational treatment will avail that dare not reach out to all the influences which enter into everyday life.

No home can furnish these means, however elegant it may be, and no insane hospital can bring freedom from all causes that are irritating: and no family physician can carry out a system of rational treatment that he does not direct personally, and have the power to enforce absolutely.

The exclusion of the exciting causes includes isolation from compounds of alcohol by a complete control over the patient, preventing him from procuring spirits when the impulse comes over him. In the case of a periodical inebriate, the return of the paroxysm may be retarded by the surroundings, and the body and mind built up so as to resist it, but it is certain to reappear, and the patient may be at the time more or less powerless to control the impulse.

If alcohol is accessible it will be used, and unless the patient is under control this cannot be prevented. Hence an institution must have legal power to restrain patients at times, preventing them from following the dictates of a diseased impulse, which grows gradually less and less, until it finally disappears. In a large majority of cases, this impulse is simply the reaction from certain states of exhaustion and debility, whose gratification may not impel them to great endeavors to procure it. As the rest and quiet of an asylum builds up healthy brain action, these reactions grow less, and are more easily controlled, and then, like the impulse of the periodic inebriate, die out.

Thus, the removal of existing causes must include all conditions which impel a man to drink, and all facilities to procure spirits while under treatment. This cannot be done in the centre of a city, in close proximity to places where spirits are sold, for the knowledge of this fact is often a predisposing cause to keep alive a thirst for spirits; nor can it be done where other active causes are not removed, as, for instance, excitement and exhaustion of any kind, want of proper food, rest, conditions of irritation, etc.

In every case of inebriety there is a definite physical cause, not always in alcohol, but in conditions which lead up to the constant use of spirits. Also, from the time of the first toxic action of alcohol there are special causes of exhaustion which may coöperate with or precipitate conditions of anæmia, instability and infirmity of the nerve element.

This state increases with the repetition of alcohol, and the combination of causes, growing further and further from the normal health standard. The rational cure can only come from definite physical change. This may be summarized in rest and proper nutrition of the nerve cell. The nerve cells of the mind centres are exhausted, and repair can only take place through rest. The blood must be improved, alcohol, of all other substances, destroys and perverts this function.

The shriveled appearance of the blood disks in the blood of inebriates proves that the organism is being starved and nutrition is broken up. Hence, special means, after the patient is quarantined from all exciting causes, in a proper asylum, are essential to improve the nutrition of the blood. Of these, iron, arsenic, cod-liver oil and milk (where it can be assimilated), are excellent. Food that will build up the tissue most rapidly should be given, particularly oatmeal, barley and rice, with wheat and corn, prepared in various ways; and fruits of nearly all kinds are found most useful. Of the various remedies that are given to build up the nerve and brain

force, the bitter barks, *nux vomica*, chlorate of potash, and phosphoric acid, are found by experience to be valuable. The electric current is, in a large proportion of cases, a decided tonic and stimulant; in others its effects are irritating, and its application is followed by a tumultuous excitement of the nerves and muscles that lasts a long time.

Sometimes these cases will only be benefited by the electric current in the latter stages of the treatment. This apparent idiosyncracy seems to pass away as the nerves grow stronger. In the first week of treatment this is not infrequent, and later, after a relapse, it may appear. The best results, in most cases, will probably be attained after one or two months of treatment; then the current should be applied along the spine every other day.

In some instances the sedative action of the current acts like a specific in cases where nervous agitation comes on from general causes, and grows gradually into an impulse for spirits. In the progress of the case under treatment many patients exhibit paroxysms of restlessness and general melancholy or irritability; sometimes these waves of mental and physical disturbance pass off in a short time, without provoking a desire for alcohol; in others the desire is present from the first, but is concealed, for the reason that the patient is either anxious to gratify or control it. These paroxysms are fortunately of short duration, and are succeeded by a period of calm and apparent full control, until finally they disappear.

Much skill and study is requisite in each case, to treat this condition or stage of the disease. To illustrate, a patient who has previously been quiet and in full accord with the physician in all efforts and means of treatment, will suddenly become suspicious and be greatly agitated over trifles, complain of restlessness, and inability to be quiet. He will eat and drink impulsively, either want large quantities of medicine or refuse to take any, and be confident that some other plan of treatment is necessary. The desire for drink will appear sooner or later, and all these diseased functional impulses seem to concentrate in that one direction, although the patient cannot realize its approach, and will be confident he will not use spirits. In some cases positive physical restraint at this time is injurious; in others, stimulating and quieting. The use of sedatives and narcotics, which seem to be indicated, vary greatly. Some forms of opium will cut off this paroxysm at once, or simply hold it in abeyance for a time, after which it breaks out with greater intensity. Belladonna and the vegetable narcotics are equally uncertain, and their physiological action is sometimes cumulative and long delayed. The bromides are more certain, yet they act often as simple checks for a time, followed by greater explosions. Where they are long continued, the paroxysm is worn out, apparently, and from debility it does not appear again. The electric current is more accurately a nerve sedative in many cases, than other remedies. Not unfrequently the most aggravated symptoms will disappear in an hour from the application of this means.

When these paroxysms occur at night, the patient is unable to sleep, and will walk the floor like a condemned prisoner, and should they last two or more days, some form of delirium, generally of suspicion and persecution, will appear. At such times the tact and skill of the physician is taxed to its utmost. Exercise is frequently suggested to the patient as the remedy, and like the drugs mentioned, it not unfrequently prolongs and intensifies the very condition it seeks to obviate.

The Turkish bath, like the electric current, is particularly valuable in a certain number of cases, and breaks up the paroxysm at once. In other cases it produces a sense of exhaustion that develops into a craving for spirits.

In one case the patient (an irregular inebriate), after a bath, becomes excessively hungry, and suffers from thirst; if he did not eat soon, he would have an intense desire for spirits, which would be very hard to restrain. In another case, when the paroxysm had developed into a sense of want of alcohol it would disappear as soon as the patient began to sweat in the hot room of the bath. The effects of moral treatment at this time are also variable and curious, from the variety of means, and the mysterious power they exercise. In an asylum where these periods can be studied carefully, and all the surroundings are controlled, mental impressions seem more powerful and lasting.

The influence of a letter from friends may either break up this period or provoke it. For instance, a wife writes to her husband of some trifling loss to herself or family, and the husband, a patient who has been resting cheerfully up to this time, begins to have the wildest apprehensions, and a tumultuous agitation, fearing the general failure of himself and all things. The condition, if not controlled, will end in an overpowering desire to drink again.

Medicine will not answer, but strong counteracting impressions and diversions are essential to

break up this state. Sometimes it is necessary to write to friends, and have them send the patients letters that will accomplish the purpose. Again, the diversion must come from the surroundings, by interesting the patient in some special work. Unlike an insane asylum, these moral and mental appliances for treatment must be positive, and interest the patient, either by their novelty and variety, appealing to every emotion, or through their intelligence, arousing a new train of thought and action. A large majority of patients, during the first three months of treatment, suffer frequently from these emotional disturbances or paroxysms, at intervals, and others are rarely free from them. The intervals between these periods are generally irregular, unless the patient is a periodical inebriate, or dipsomaniac, when they recur with great regularity. It has been found, without knowing why, that labor and occupation are essential, hence it has been urged by a class who know only in part, that the treatment cannot be successful unless this is the principal means. But in face of their assertions, hard labor in prison and close occupations do not heal or restore inebriates who are confined in such places. The fact is that occupation of mind and body, applied at certain times in the treatment of inebriety, is a veritable therapeutic measure, but its application is limited to particular conditions and times.

To make chair-bottoming or shoemaking the labor of an asylum, and force all inmates to engage in it, would be to fail in curative measures; or to go to the other extreme, and gather all patients into prayer meetings, appealing to their religious emotions two or three times a day, is equally certain to fail in a permanent cure. Occupation of mind and body is rationally all means which will prevent and break up these nerve paroxysms, and divert the mental and physical energies from exploding through these inebriate impulses. A few illustrations from every-day life in an asylum will explain this more clearly.

Case 1.—Is a periodic inebriate who every seven days has a period of intense sorrow and anxiety about his family. The treatment, besides small doses of bromide of sodium, consists in engaging his attention by driving out, giving him certain care and responsibility, enjoining on him the most minute directions as to exercise and baths. In twenty-four hours this passes away.

Case 2—Is an irregular inebriate who, from various causes, will become nervous and restless, and anxious to go back to business, although he has no business and no prospects of any kind. He will prepare and carry out the most elaborate schemes to go away, and be greatly agitated over them. After baths and the electric current (if not contra-indicated in the treatment) the mind can be diverted by examining the resources of Alaska or Central America, to find out the best prospect for business enterprise. In a few hours the agitation passes away and he is contented.

Case 3.—Is an irregular inebriate who becomes deeply engaged in the wrongs of others, and for several hours will go about seeking redress in the most hysterical manner, with much emotional excitement. If a patient has lately been admitted, and is suffering from what he thinks should be relieved by alcohol, he will espouse his cause and intrigue to procure spirits for him. The moral treatment consists of sharp reprimands and prompt, decisive commands to desist and look after his own interest. This, with remedial measures will suffice, and in a few hours he recovers.

No. 4—Is also an irregular inebriate, whose periods of nervous agitation disappear after a long walk.

No. 5—Is a similar case who recovers from some occupation of a few hours, as, for instance, working in the garden, arranging books in the library, or copying some article.

No. 6—Is a dipsomaniac who suffers every ten days from profound religious depression and agitation. The effort and excitement to write a temperance lecture will break up this depression. Brief religious service once a day, consisting largely of singing, in which all the patients may join, have a marked effect, not only to divert the mind, but to rouse up a new train of thought and feeling. Lectures, concerts, theatricals that are short and not exciting, have a strong influence and power in many cases. In these cases the study is to find subjects outside, upon which the mind may be concentrated and the energies of the body engrossed.

FRACTURE OF THE OS FEMORIS; ITS METHODS AND RESULTS.

BY E. MICHENER, M.D.,

Toughkenamon, Chester County, Pa.

I accepted the profession of medicine as a God-given trust, with feelings similar to those expressed by Dr. Winston (Reporter, Nov. 4th, p. 523), though perhaps with very inferior facilities. Under the growing infirmities of age, I have re-

leased myself, as far as practicable, from its responsibilities; but this does not absolve the obligations which I owe to the younger members of the profession, and to suffering humanity.

I was very early impressed with the incertitude of the teachings and the various methods employed in the treatment of fractures, especially the typical lesion of the shaft of the os femoris, which so often resulted in shortening and permanent lameness.

Under this impression, I devised a method of treating this fracture, which has proved entirely satisfactory and successful, during a period of more than sixty years. For a brief notice of this method, see MEDICAL AND SURGICAL REPORTER, Feb. 8th, 1881. See also, How Bones Break, etc., Nov. 19th, 1881.

Subsequently I brought the subject before the Medical Society of Chester County, for its consideration, who graciously appointed a committee of inquiry. A portion of the committee made me a courteous and acceptable visit. They referred me to Dr. Ashhurst, Professor of Clinical Surgery in the University of Pennsylvania, as a standard authority in such matters. Just where we should look for, and expect to find, the highest and noblest conception of practical and artistic skill in the treatment of this important lesion. But, so far as I know, the committee has failed to report the result of their inquiries. For

> "Who, that from Alpine heights, his laboring eye
> Shoots round the wide horizon, to survey
> Nilus, or Ganges, rolling his bright waves
> * * * * * will turn his gaze
> To mark the windings of a scanty rill
> That murmurs at his feet?"

I accordingly reported my views to Prof. Ashhurst, emphasizing the facts—

1. That bones generally break dentated, the dentures readily interlocking, and holding the fragments in place.

2. That I had not found a fracture so oblique that the serrations would not hold the fragments in position when properly adjusted.

3. That I had never employed direct mechanical extension in the treatment of this fracture, and

4. That I had never discharged a patient with a shortened limb; or a limper.

To this I received the following kind and courteous reply:—

"DEAR DOCTOR: In reply to your very interesting letter, I would say that, in my experience, oblique fractures of the femur are more common than transverse fractures; and that I cannot recall more than a single case in which I have succeeded in curing a fracture of the thigh without shortening.

"Though, no doubt, most fractures are at first serrated, and this serration may, for a time, keep the fragments together, yet on the conversion of bone into granulation tissue, which precedes union, those serrations sometimes disappear, and hence consecutive shortening is very common.

"Very truly and respectfully yours,

"JOHN ASHHURST, JR."

I was grieved at this rebuff from such a source; a manifest indifference to the practical results which I had reported. But on taking up the REPORTER of 4th February last, I was delighted to see the announcement of a clinical lecture on fractures of the long bones, by Dr. Ashhurst, only to be again disappointed.

Now, standing at the portal of another world, I desire to make a hasty comparison of some of the methods and results of Dr. Ashhurst and myself.

There is shortening; you, therefore, need some means of extension. The older surgeons relied on the use of their hands, and upon splints, to maintain it; but in modern times the weight extension has been adopted. The method is now generally known as Buck's, or the American treatment.—*Dr. Ashhurst.*

I own to an "old surgeon," I greatly prefer a careful diagnosis, a skillful manipulation, and an accurate adjustment, and the retention of the fragments by appropriate dressings. These are of too much importance, in their immediate and ulterior results, to be delegated to the most ingenious combination of iron pulleys and weights.

Rather, let an assistant make the extension; very gentle at first, increasing it slowly, to avoid pain or exciting the femoral muscles to resistance. It may require five or ten minutes, an hour; no matter; don't be in a hurry. When the fragments are brought into a favorable position they are, in most cases, easily coapted. The dentures interlock, and the tonicity of the muscles holds them together. It is a rule, to which there should be few exceptions, that the bone should not be considered set until this result has been obtained.—*Dr. Michener.*

I do not suppose that we shall find much shortening in this case, as extension has been applied for forty-eight hours. We now have the patient squarely on his back. The right leg measures almost 34 inches; the left, not quite 33 inches.—*Dr. Ashhurst.*

Here appears to have been a disappointment. The limb was still an inch too short. So much to the credit of weight extension.—*Dr. Michener.*

We have applied here one brick. This afternoon we will add another, and, in the course of a week, a third. The weight should not, as a rule, exceed twelve pounds. What has become of Snowden's perfected apparatus? (REPORTER, April 2d, 1881.)—*Dr Ashhurst.*

I have already stated, and repeat the assurance, that I have for a long period treated patients with this fracture, from six months old

up to more than seventy years, successfully, without mechanical extension and without shortening. The question then arises, whether is it better to pursue the indefinite and uncertain method of machine extension, with all its horrors, or to reduce the fracture at once, and hold it so by appropriate dressings? Whether is the suffering or comfort of the patient worthy of the surgeon's notice?—*Dr. Michener.*

I have said indefinite and uncertain; I cannot recall more than a single case in which I succeeded in curing fracture of the thigh without shortening.—*Dr. Ashhurst.*

This shortening, if it does occur, from the conversion of the fracture facets into granulation tissues, and the subsequent condensation of the callus; is necessarily limited by the extent of the softening, is hardly appreciable; or what my friend Dr. Edw. Jackson has aptly termed, shortening without limping. I shall endeavor to show that no such retraction of the limb can take place under proper treatment.—*Dr. Michener.*

We need some support for the sides of the limb. I think that you will obtain better results from the use of these old fashioned, long splints—Physic's modification of Desault's apparatus. The outer splint should reach from the axilla to below the foot; the inner one from the groin to below the foot. We now secure the splints (rolled in a splint cloth), to the limb; padded with junk bags filled with bran. The splints are confined by five strips of bandage; one at the ankle, one at the knee, one below the groin, one at the crest of the ilium, and one around the chest.

When removed to the ward, we shall make counter extension by elevating the foot of the bed.

When the effusion in the knee-joint goes down, so that we can handle the joint without pain, we shall, at each dressing, if necessary, rotate the knee inwards, in order to overcome the tendency to eversion.—*Dr. Ashhurst.*

When, in the name of humanity, is this cruel, useless and meddlesome surgery, this tugging and twisting of the broken bone, to have an end?

It is no small matter to subject a patient to be thus pinioned down on his back for six or eight weeks, with a weight extension of twelve or more pounds, to be counteracted by making the bed an inclined plane and the head of the patient the most depending part. Does the partial success reported by Dr. Ashhurst warrant or excuse him to persist in such severe treatment, to the exclusion of milder means, which claim greater success?

In the case of children, from six months upward, I have always used an extemporized splint, made on the occasion, by cutting a shingle in two, and nailing them on an angular block. This simple fixture, with a bandage of strips, and a set of thigh splints, have fully met every indication.

For adults I use a more elaborate instrument, constructed more than sixty years ago. It is adaptable to all cases, and is always ready for use. Like the above it is virtually nothing more than an angular, concave, bed splint. (See Reporter, 8th Jan., 1881.) The minor thigh splints are important. They are formed of three strips of light wood, glued on a piece of muslin or thin leather. They should always embrace the whole length of the thigh, exclusive of the condyles. The padding should not exceed two or three smooth folds of soft flannel.

The dressing then reads, the angular bed splint, a strong bandage of strips, two lateral, and an upper thigh splint; the whole held by four unyielding leather bands, buckled tight around them. The foot may be supported, or left free, at the option of the patient, as the foot suspended over the angular splint has neither the tendency nor the power of eversion. This is only one of the many advantages derived from the angular position of the limb. I have never used any other. I prefer an angle of 35 or 40 degrees.—*Dr. Michener.*

You see, by this dressing, we fix the joints on both sides of the fracture. You may lay it down as a rule, *that in all fractures of the long bones, you must fix both the joint above and the one below the seat of fracture.—Dr. Ashhurst.*

I demur to this rule, as being erroneous in principle, and pernicious in practice.

It is self-evident that the long splint will rest upon the trochanter major and the external condyle. The inner one upon the internal condyle and in the groin, which is always intolerant of pressure. Thus the more important bone and surrounding tissues of the thigh are left without any more efficient support than bags of bran are capable of affording. And what is the result? The joints have been fixed; the fracture only partially so, if at all. The patient must, and will, seek relief by moving, so far as he can. Every motion extends to the injured limb and reacts upon the most movable part. And the joints being more stable than the broken bone, the reaction must inevitably fall upon it, as the point of least resistance.

I do, on the contrary, lay it down as a rule in this form of fracture, *the dressings should be exclusively applied to the injured thigh. Make its integrity complete by its own appliances, leaving the hip and knee joints free to respond to every movement of the body.*

Here, the whole extent of the femoral tissues are firmly grasped, and held together; muscular action is completely suspended; and any necessary or accidental motion reacts upon the free joints, leaving the intervening thigh to move in its entirety, without disturbance of the fracture. Hence the importance of an early and accurate adjustment of the fracture, before the dressings are applied.

Whatever appliances may be used, I believe that the secret of success lies in the skillful adjustment of the fracture; and a strict observance of the above rule in the application of the femoral dressings. Dress the injured member; not the man.—*Dr. Michener.*

It is not safe to allow the patient to walk in less than eight weeks. I remember a patient in the Pennsylvania Hospital, who had made

a good recovery [?] from fracture of the thigh, and was allowed to go about at the end of six weeks. There was at that time one-fourth or one-half an inch of shortening. After two or three days there was found two inches of shortening. At this time the callus uniting the bones is soft, and the pressure from walking readily causes consecutive shortening.—*Dr. Ashhurst.*

I have usually substituted light dressing, at the end of six weeks. But after the dressings which I used, the femoral muscles do not for some days recover power to use the limb in walking.

This extraordinary case seems to have been brought forward to illustrate what the lecturer considers to be the ordinary conversion of bone into granulation tissue. But it cannot belong to the same category with Dr. Jackson's cases of shortening without limping.

As a rebutter, I will recur to a case, already published (REPORTER, Nov. 19th, 1881, p. 567). A child of seven summers had her leg caught and dragged, under a log, on the public road. The soft parts of the upper anterior and inner tibial region were entirely torn away, the bones broken, the leg doubled back on the thigh, and the fragments all projecting. I noticed that the fractures were neither transverse nor oblique; they were dentated. After cutting off more than an inch of the upper tibial fragment, which was denuded of its periosteum, and left without any possible covering, I interlocked the dentated fragments of the fibula; and with the aid of a light lateral splint, and an angular splint underneath, rendered it an available stretcher to preserve the length of the limb, during the long period required for the cure. Notwithstanding the arduous duties imposed on this youthful fibula, there does not appear to have been softening, and consecutive shortening. There was, and is, no appreciable difference in the length of the limbs; nor the semblance of a limp. The subject of this narrative, a highly respected young lady, Mary Woodward, resides with her father, George Woodward, in Unionville, this county. Reference may be made.—*Dr. Michener.*

INHALATIONS OF ALCOHOL IN CROUPAL DIPHTHERIA.

BY DR. C. T. MELSHEIMER,

Bluffton, Ind.

Will the inhalations of alcohol cure croupal diphtheria, is the question that I wish to submit to your numerous readers, with a view of its solution by frequent trials in this exceedingly fatal disease. Some six weeks ago I was brought in contact with a typical case of this kind, and my former experience admonished me of the frailty of our present mode of medication, yet, as a matter of ease to my conscience, I gave the patient the benefit of the most approved treatment for some time, without deriving any benefit. The fact was, something more had to be done, and that something was nothing more than the inhalation of hot alcohol, by way of experiment. Under this treatment the patient made a good recovery, without the usual sequelæ that follow the graver forms of this disease, and were it not for a slight aphonia, her health is as good as it was before her marvelous escape from death. How much credit is due to this form of treatment I am not prepared to say, but my firm belief is that it was instrumental in saving her life. It may be possible that it had no effect whatever, and the recovery was simply due to one of those remarkable evolutions in nature that sometimes so unexpectedly comes to our relief in hopeless cases. Hence a more extensive trial will be necessary to determine the efficiency of this course of medication, etc.

On the 21st of October last I was summoned to visit Hattie Herbst, a resident of this place. Her mother reports her to be seven years old, and that she had been in good health prior to the 15th, when the exposure of a buggy ride through a "raw and chilly atmosphere produced a chill, followed by a mild fever. On the 16th she was well enough to attend school, and she continued so up to the afternoon of the 17th, when the return of another chill forced her to go home. On Wednesday, the 18th, her mother gave her several doses of quinine, which had the effect of abating the fever on the following day; but in the evening a hoarseness declared itself, with a dry, irritative cough, for which some kind of patent expectorant was given. Friday she appeared some better and continued so up to Saturday, when her cough and hoarseness progressively increased, and by night her cough had become croupal and her speech reduced to a mere whisper. This, in brief, is the history her mother gave, and the reason for not seeking medical aid sooner was that she made no special complaint of pain, or presented other symptoms of alarming illness until within a short time of my visit. I found her pale and anæmic-looking; skin dry, not very hot, with a temperature in the axilla of 99.30.° Head clear, senses intact; complains of pain in the left mastoid region. Countenance expressive of anxiety; yellow-coated tongue; a highly congested mucous membrane of the fauces and pharynx; enlarged tonsils, studded with irregular patches of dark gray deposit, forming parchment elevations that were surrounded with a border of dark red, which bled on the slightest touch. Perspiration stridulous and labored; croupal cough, with aphonia; no appetite, stomach irritable, bowels inclined

to constipation, urine partially suppressed, high colored, acid reaction, albuminous, and a specific gravity of 1.030; extremities cold; pulse 130 and very weak.

Now, if there is anything in the practice of medicine that is better calculated to humble the pride of a physician than a case of this kind, I have thus far failed to make the discovery, and I am very thankful for it. But we are called on to do something, and in our doing so we but demonstrate the impotency of our remedies and exhibit our ignorance of the cause to which they are directed for its removal. To be as consistent as possible with our imperfect knowledge of this disease, I prescribed stimulants in combination with iron, quinine, and chlorate of potash every three hours. Topical applications of tinct. iron and glycerin every four hours. Ordered the atmosphere of the room to be kept constantly moist by means of a large wash boiler of hot water, and in connection used inhalations of a five per cent. solution of carbolic acid every four hours, by means of a small antiseptic atomizer. This treatment was continued with variations in inhalation for some sixty hours without any improvement whatever; in fact, grew from bad to worse right along. There was a progressive increased difficulty of breathing, with spasms of the muscles of the glottis, that threatened a speedy death from asphyxia. Her countenance and extremities were purple. Pulse 160, thready and irregular, recession of the sternum and intercostal spaces with each inspiratory effort; she appeared to be beyond the relief of medicine, yet notwithstanding this hopeless condition I practiced the doctrine that as long as there was life there was hope. I abandoned all former treatment, with the exception of moist air, and resorted to the inhalations of hot alcohol, knowing that it would not compromise her condition in the least, and might possibly be the means of warding off death for a short time, at least; the alcohol used was rated at 88 per cent., and maintained at a temperature of 150° in the medicated cup. It was inhaled at a temperature of 120°, and reached the lungs through the nozzle of the atomizer, with a strength of about forty per cent. During the inhalation, which lasted about fifteen minutes, the pulse lost its intermittent character, and became somewhat fuller, the breathing more moist and less difficult. The paroxysms, that threatened speedy dissolution, were relieved, and a decided improvement for the better gave some hopes of recovery. The inhalations were kept up at regular intervals of two hours through the night, and by the following morning she presented every promise of returning health. The blueness of the face and extremities was disappearing, her breathing was much less difficult; she expectorated large quantities of flaky, membranous matter, had increased secretion from the kidneys, and improved appetite. To facilitate the expectoration a preparation of syr. senega, spts. nit. and sanguinarine, in sufficient doses for this purpose, was prescribed every three hours. This, in fact, embraces the only treatment, and with exception of a slight aphonia yet remaining, she is restored to health. At no time throughout the disease did the thermometer register more than 100°, with a low blood pressure, as was indicated by the character of the pulse. Her urine was scant; the eliminations from the kidneys seemed to hold a direct relation to the difficulty of breathing; at her worst period the amount of albuminous matter was equal by bulk to the urine.

Query.—What effect has the highly carbonated blood on the vaso-motor nerve? Does it become partially paralyzed to that extent that the peripheral zone of the renal capillaries becomes so weakened as to lose the power of resistance, and as a consequence, produce a passive interstitial congestion. I pause for a reply.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINICAL LECTURE BY WILLIAM PEPPER, M.D., LL.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

Lymphatic Pseudo-leucæmia.

Gentlemen:—Owing to my absence, I had not an opportunity of examining the patient from whom the specimens before us were removed.

I shall first read the history of this case, and then call attention to the results of the autopsy.

F. H., white; age 22 years; resident of Pennsylvania; a brakeman on the railroad by occupation. When ten years old, he began to work at picking slate, and from that time he has been much exposed to the weather. For the past two and a half years he has been employed as a brakeman. He used tobacco in every form, and coffee and alcohol (chiefly in the form of malt liquors) to excess. At the age of thirteen he had gonorrhœa, but denies ever having had syphilis. His parents are living and healthy; one sister has dropsy and another ophthalmia; another sister and two brothers are living and healthy. He has had whooping cough, but none of the specific diseases of childhood.

About the time that he had gonorrhœa, *i. e.*, nine years ago, he noticed enlargement of the glands under the right ear. These increased in

size, and gradually other glands became involved. All the tumors except one in front of the left ear were painless.

Six months ago urination increased in frequency, and the passage of the urine began to cause irritation. This became more marked until, when he was admitted to the hospital, he had to empty his bladder every five minutes.

About four months ago he began to feel a tingling, pricking pain in the lower extremities, extending from the crests of the ilia to the toes. He would occasionally, while urinating, feel a quick, darting sensation pass through the legs. During the past month the pricking pain extended above the iliac crest into the renal regions. The severity of the pain obliged him to quit work two and a half months ago.

Two months ago angeioleucitis, *i. e.*, inflammation of the lymphatic vessels and glands, developed in the left leg. This, apparently, was caused by the pressure of a large mass of glands upon the femoral vein and the lymphatics, as they pass through Scarpa's triangle. This condition remained for about a week.

He had lost some flesh, but with all his suffering, he had not become very much emaciated. He had lost strength, particularly during the past two or three months. He suffered from occasional hemorrhages, usually from the nose, but once from the bowel.

His condition at the time these notes were taken was as follows: "Hair brown; eyebrows and lashes black; the pupils of the eye contracted; face sallow; conjunctiva and sclerotic pearly and anæmic; the mucous membrane excessively pale." In other words, he presented all the evidences of a high degree of anæmia. The cervical and post-auricular glands enlarged; the smaller glands being round, smooth and painless, and the larger masses nodulated, and apparently made up of an aggregation of small glands. These were not freely movable. Only one of these masses (one in front of the left ear), was at all painful. At the vertex of the skull there was a ridge, running obliquely forward from right to left. This was firmly adherent to the tissues beneath.

Three years ago a gland was removed from the right side of the neck. The tumors were larger on the right side than on the left. The glands in the axillæ were enlarged. Both groins were affected, the left more than the right.

The left leg was white, œdematous, not painful; the skin tense, shining and cooler than on the opposite side. There was no œdema of the right leg. The tongue was red, flabby, fissured, but not coated. Appetite pretty good, and, except when he was indiscreet in his diet, he had no dyspepsia. The bowels were constipated and the stools dark in color. On percussion, the liver dullness was found to extend from the fourth rib to one and a half inches below the margin of the ribs. Hence there was considerable enlargement of the liver. On the left side a mass, dull on percussion, was found extending from the sixth rib above, to the level of the umbilicus below, and from the median line in front to the left lumbar region behind, where the dullness merged into that of the left kidney. This could scarcely be anything else but the spleen, greatly enlarged. The abdomen was tympanitic and without effusion.

The heart was pushed upward, the apex beating in the fourth interspace, in the line of the nipple. On auscultation, there was discovered a low-pitched, indistinct, blowing, systolic murmur, loudest at the apex and conducted into the axilla in the line of the apex. There was retraction of the apex with the systole of the heart; that is, at each beat of the heart the intercostal tissues at the apex were drawn in. The second sound was sharp. The aorta could be felt beating at the supra-sternal notch. The pulse was full and rather compressible.

Urination occurred every five minutes and was accompanied by severe pain. The urine was usually clear, but at times contained yellowish, stringy matter. The attempt to retain the urine caused great pain.

Before going further, let us consider the condition of the heart. Did the symptoms indicate disease of the heart? We have found that there was displacement of the heart, retraction of the tissues over the apex during the systole, and a low pitched murmur heard over the body of the heart and transmitted to the left. We cannot say that there has not been pericardial adhesions, which would cause retraction of the apex as the heart passed into systole; but the heart is so displaced and the normal relations of the parts so altered, that I should not attach the same importance to this sign in the present case, as I should if it were found with an enlarged heart and the liver and spleen about normal.

Does this murmur indicate mitral regurgitation? As you are aware, a murmur occupying the time of the systole of the heart, heard best at the apex and conducted to the left in line of the apex, is, under ordinary circumstances, pathognomonic of mitral regurgitation. Here, however, was a man intensely anæmic; when the crasis of the blood is so altered, it is thrown into vibration in its passage through the heart and blood vessels, and gives rise to a murmur. This is termed an anæmic or hæmic murmur. Such a murmur may have been present in this case, and have been conducted to the left through this large mass lying in contact with the heart, thus explaining the transmission of the anæmic murmur in that direction. Ordinarily, a hæmic murmur is not transmitted to the left, as its force is not sufficient to carry it through the spongy tissue of the lung. An organic murmur is carried to the left, because it is usually a murmur of greater penetrating force, and, in addition, is usually associated with alterations in the size and situation of the heart, which push away the lung tissue. From the history I should not definitely conclude that there is organic disease of the mitral value; even if there be a little disease of the mitral valve, it is clear that the intensely anæmic state of this man's blood would exaggerate any murmur produced there, and would explain in part its loud transmission to the left.

In regard to the urinary trouble. It is apparent, from the frequency of micturition and the character of the urine, that the condition could not be explained by mere acidity of the urine. There must have been chronic cystitis.

Finally, what are we to think of this curious, pricking pain which has been described as extending from the toes to the line of the ilium, and later, extending to the region of the kidney? I think this to have been due to the pressure of enlarged glands within the abdomen, upon the nerves emerging from the vertebral foramina, and passing into the legs.

I shall now complete the reading of the history.

The cremasteric and patellar reflexes were good. Sensation was diminished in the lower extremities. The line between normal and impaired sensibility corresponded to the crest of the ilium. There was loss of power over the lower extremities, *i. e.*, paraplegia; with this, dull pains in the calves of the legs, and darting pains and twitching in the lumbar region, were complained of. There was no sensation of chorda, *i. e.*, the feeling as though a cord were tied around the waist.

He was slightly hard of hearing in the left ear, but the other special senses were normal.

The urine was normal in quantity, with a specific gravity of 1.020. It contained neither albumen, nor sugar. The sediment consisted of amorphous and other phosphates, vesical epithelium, pus cells, but no casts, the absence of casts showing that the kidneys were not affected.

Sept. 5th. Œdema increasing.

Sept. 11th. The appetite began to fail, and there was dribbling of urine.

Sept. 12th. The blood was examined, and the proportion between the red and white corpuscles found to be normal.

Sept. 13th. The urine continued to dribble, the pain in the back still present. Temperature 100°. Continued to sink until he died, yesterday, Sept. 18th.

In considering these marked symptoms of paraplegia, etc., which I have just read for the first time, let us carefully study the condition of the spinal cord, as we have it from this relation of symptoms.

We here notice an interesting relation between the urinary symptoms and those belonging to the spinal cord. There are certain groups of cases where it is sometimes puzzling to determine which has been the primary trouble. A man who has had long continued irritation of the bladder gradually becomes paraplegic. In such a case we have to decide whether there has been a slow degenerative change in the antero-lateral columns (the motor columns) of the cord, gradually producing paraplegia and affecting the walls of the bladder (which are always affected when the paraplegia becomes at all complete), allowing the urine to remain in the bladder and undergo putrefactive changes, thus becoming a source of irritation, and producing cystitis; or whether, as a result of the long standing cystitis, the irritation has, by reflex influences, so acted upon the lumbar portion of the cord that its nutrition has been affected to such an extent that this portion of the cord passes into a state of anæmia, mal-nutrition, and possibly of softening. We have produced in this way reflex paraplegia, which may eventually be associated with organic changes in the cord.

The exact way in which the irritation of any extremity or surface gives rise to reflex paralysis is interesting and instructive, but a somewhat difficult subject for consideration. There are different views concerning it, but, in the first place, it is clear that the constant drain upon the nerve force of a section of the cord, which must occur where there is a constant irritation for months or years, must end by exhausting that centre. This may give rise to a functioual paralysis. An examination of the cord may reveal no signs of organic disease.

Again, you can readily understand that as the vessels of any part are influenced by nervous action, and that as distant irritation is able to cause spasmodic contraction of these vessels, a long continued irritation may cause such a continuous contraction of the blood vessels of a segment of the cord, so impairing its nutrition, that it may pass into a state of slow degeneration and passive softening. In the present case the urinary irritation had certainly lasted sufficiently long to produce reflex paraplegia. But urinary irritation was not the only trouble this man had. There were masses of enlarged glands externally, and in all probability internally also. I have no doubt we shall find the glands along the spinal column enlarged. Here, then, might be another explanation of the paraplegia: direct pressure upon the nerves emerging through the vertebral foramina; not only so, but the enlarged glands may have extended through the foramina, and actually pressed upon the substance of the cord. These possibilities must be considered. What do we learn from a study of the patellar and cremasteric reflexes? These were well marked. The reflex from tickling the sole of the foot was also present. These reflex phenomena are impaired when the posterior columns of the spinal cord suffer from organic disease; but they remain and may indeed be excessive in cases where the lateral or the antero-lateral columns are the seat of disease. You have heard that sensation was impaired. This would point to a lesion affecting the posterior columns of the cord. So that it is not improbable that we had in addition to the reflex paralysis (which we might expect to find from the long continued cystic irritation), an encroachment of these enlarged glands upon the nerve cords or on the spinal cord, or even actual changes in the spinal cord.

This is an exceedingly complicated and interesting case, and we are at a great disadvantage in having only the post-mortem record from which to study it.

What was the matter with this man? We have considered the vesical and the nervous trouble, but neither of these was the primary trouble. The initial disease was a progressive hypertrophy of the lymphatic glands, and eventually enlargement of the liver and spleen. We find enlargement of the lymphatic glands in syphilis, cancer and scrofulosis. We also find it where none of these diseases exist, and where it apparently constitutes the whole disease. The patient sinks into a condition of anæmia; the exhaustion increases, and he dies. After death the lesions are those of a curious overgrowth of the lymphatic structures.

Had this young man cancer? Primary cancer

of the lymphatic glands is exceedingly rare. Cancer of the glands usually occurs after cancer of some other part. A man has a cancer of the testicle, and the glands of the groin become affected, or a woman has a cancer of the breast, and the glands in the axilla become involved, but cancer very rarely begins as a primary disease in the lymphatic glands. Still I have seen it occur, even in young children. I remember distinctly a case, which was sent to me several years ago, of a little girl, about seven years old, in whom a lump came under the left ear, and which proved to be a primary sarcoma of the glands; I watched the case throughout its whole course (about nine months); it terminated as a fungus hæmatodes. When cancer does occur in this way, it does not usually affect the glands all over the body; it runs a rapid course and invades adjoining tissues. In this case nine years had elapsed since the appearance of enlargement; there had been a widespread development; the tumors were painless; they had never softened nor undergone suppuration, and they had never invaded the surrounding tissues, but had remained movable. We may then dismiss cancer.

It was not a case of scrofulosis. Scrofulous glands usually, sooner or later, undergo inflammation and suppuration, but here, for nine years, the glands had gone on enlarging, and not one of them showed the least sign of inflammation. Nor has there been a secondary development of tuberculosis, as commonly happens in cases of scrofulosis.

Occasionally syphilis, whether acquired or congenital, gives rise to widespread disease of the lymphatic glands. The history of the condition of this man's father and mother, and of the other members of his family, would not indicate that he had suffered from inherited syphilis. He had neither the notched teeth, the interstitial keratitis, the ozæna, the evidences of cutaneous eruptions, nor the affections of the osseous system, which are so commonly found in inherited syphilis. There was no evidence of acquired syphilis in his history or symptoms. He admitted having had gonorrhœa, and apparently recovered from it. We can hardly suppose that a simple mucous catarrh, lasting but a few weeks, should have any connection with this widespread constitutional disease.

If this has been neither cancer, scrofulosis, nor syphilis, it must have been an instance of that curious disease of the lymphatic system which has been described under the names, leucæmia, Hodgkin's disease, lymphadenoma, and the like. This certainly was not a case of true luecæmia. There are two sets of cases spoken of by this name. In one, the proportion between the white and red corpuscles is greatly increased from the normal of one white to two hundred red, to one to fifty, one to twenty, and one to five, and sometimes, the white globules equal the red. In the second set of cases the white corpuscles do not increase in number, but the red are decreased. This form has been termed pseudo-leucæmia; to this class Trousseau has given the name of lymphadenoma, and Hodgkin, who described it, left his name to distinguish it. The second class seems to be identical with the first in everything except the increase in the number of white corpuscles. This man had no increase in the number of the white corpuscles.

I shall now ask your attention to the specimens before us. This mass, as large as a small fist, was taken from the left groin. It pressed upon and was adherent to the femoral vein, and accounts perfectly for the affection of the left leg. The character of this enlargement is that which we find in leucæmia and pseudo-leucæmia. It is firm. On section it presents a variegated appearance. All the glands along the spinal column were enlarged, and pressed upon the nerves emerging through the vertebral foramina. Possibly they extended through the foramina and pressed upon the cord, but we were unable to determine the exact condition of cord, because we could not obtain permission to examine it.

Here is the spleen, which was the large mass occupying the left hypochondriac region. It is greatly enlarged and the capsule thickened. On section its pulp shows considerable enlargement of the Malpighian bodies, but I do not see any of the white masses so commonly met with in splenic leucæmia. The spleen will often be studded with masses, which careful study show to be aggregations of Malpighian bodies in a state of fatty degeneration.

The liver is also greatly enlarged. It weighs five and a half pounds. There is thickening of the capsule and congestion of the organ, but I do not find any of the little nodules which sometimes result from hyperplasia of the lymphatic follicles within the organ. A small nodule was found at the time of the autopsy, and removed, for microscopical examination.

The kidneys are hardened, and their tissue presents the evidences of chronic congestion. The lining of the pelvis is roughened, and at one point I see a little neoplasm growing from the mucous membrane. This will be removed for microscopical examination.

The heart is not enlarged. The aortic valves are normal; the mitral valve is slightly thickened, but not enough to interfere with its functions. The murmur must then have been chiefly due to the altered state of the blood.

Here, then, is a case in which the history is that of leucæmia, and in which the autopsy shows the same organs, viz., the lymphatic glands, liver and spleen, to be affected as are involved in leucæmia, but in which examination of the blood showed no increase of the white corpuscles. As I have said, there are two forms of leucæmia: true leucæmia, in which the white corpuscles are increased in number, and false leucæmia, in which they are not increased.

This seems to be a case of pseudo-leucæmia, unless the microscopical examination of these glands should show that this is the exceedingly rare affection of sarcoma of the lymphatic glands attended with enlargement of the liver and spleen. It would be extremely rare to have sarcoma occur in a lad in the way this has done, with no pain, with no tendency to invade surrounding tissues, or to suppurate, and lasting for so long a time.

Last winter I showed a case here, in many respects similar to this. It was that of a man covered with lumps. The disease involved the glands of the neck, the axilla, the groin, the ab-

domen, and in addition, they appeared in the subcutaneous tissue everywhere. The skin over these tumors was discolored and adherent, and the swellings were painful. The liver and spleen were not enlarged. As the case advanced paralysis of the legs appeared. At the autopsy, we found that the glands along the spinal column were enlarged and pressed upon the nerves, paralyzing them, and so affecting the nutrition of the cord that structural changes had taken place in it.

The microscope will have to decide whether this has been a case of lymphadenoma or of sarcoma of the lymphatic glands. The clinical history is in favor of the former disease. I shall report to you and show you the drawings of the microscopical appearances of these glands.

NOTE.—The microscopical examination of the glands revealed the lesions of leucæmia.

EDITORIAL DEPARTMENT.

PERISCOPE.

Carbolic Acid and the Carbolates.

The following résumé of the properties and effects (physiological and otherwise) of carbolic acid and its compounds, according to the most recent works on the subject, appeared in the *Progrés Medical*, No. 46, 1882:—

Crystallized carbolic acid is soluble in fifty parts of water (when chemically pure in twenty parts Binz, Hager), and in every proportion in alcohol, ether, chloroform, sulphide of carbon, glycerine.

Absorption is rapid, even through the skin when intact. Elimination is rapid by the skin, lungs and kidneys.

In the urine, when the acid has been introduced in small quantities, a phenol sulphate, nontoxic, is found; when the doses have been large another phenol compound is found (Baumann). The urine is very often of an olive-green or greenish gray color, particularly when the acid has been absorbed through the skin, or through a wound. In some cases, but rarely, albumen has been found. *Principal physiological effects:* In the dose of from five to seven grains it has no toxic effect.

In larger doses, up to thirty grains, it induces excitation, stupefaction, vertigo, ringing in the ears, feebleness, diminution in frequency of the pulse, fall of temperature, colic and diarrhœa. In toxic doses it causes vertigo, delirium, stupor, anæsthesia, analgesia, intermittence and final arrest of heart in diastole; very rarely convulsions, collapse, coma and death. *Counter-poisons:* Sucrate of lime (Huseman), sulphate of soda and the other sulphates (Bausmann), inhalations of oxygen, bleeding, transfusion (Ferrano).

The local effect produced by weak solutions is a sensation of burning, which disappears in the course of half an hour. This is the effect produced by hypodermic injection of Hueter's solution, which contains two per cent. of the pure acid; it gives rise also to ecchymosis of limited extent, but without the formation of an abscess. Hueter employs it in hypodermic injection, to prevent the spread of erysipelatous inflammations to the adjoining skin; five or six injections, of 20 drops each, are made in the skin, just around the part affected, and are repeated a second time the same day; very often the spread of the inflammation is arrested.

Hypodermic injections of carbolic acid have been employed in intermittent fever, by Jessier, Declat, Hueter, Hirschberg; in prurigo, by Rezek and Fleischmann; in diphtheria, by Frotz; in phthisis, by Schnitzler; in crural neuralgia and pleuro-pneumonia, by Hayem and Kunze; in typhoid fever, by Declat; in malignant pustule, charbon, by Raimbert and Meplain (solution, 1 in 50); in nævus, by Badley; in acute articular rheumatism, by Senator, Kunze and Golbaum.

Borax or Boracic Acid, in Diphtheria.

At a recent meeting of the Clinical Society of London, Dr. Goodhart narrated six cases.

In four a saturated solution of boracic acid in glycerine was used, the application being made in part by a hand-spray, in part by a laryngeal brush, and as often as every two hours, in some cases. In the other two a dilute solution of the glycerinum boracis was used. The first case was a very severe one, and it died from the renal complication on the seventh day, but the boracic acid and glycerine seemed to be so successful in relieving the throat symptoms, and in preventing the re-formation of membrane, that it was determined to try it again. Of the other five, three had "croup," as well as membrane on the fauces; one had nasal diphtheria; all had albuminuria. All recovered. Tracheotomy was necessary in one case, and the glycerinum boracis was freely applied to the interior of the trachea and larynx from the wound, and to the surface of the wound itself, and it seemed to be very beneficial in loosening, dissolving and preventing the re-formation of membrane. In another case it is believed that tracheotomy would have been necessary had not the rigorous application led to the expulsion of membrane by the mouth. In all cases it seemed to give such relief that very little difficulty was experienced in carrying out the treatment. Both borax and boracic acid have been occasionally in use as a topical application in diphtheria, doubtless for a long time past, but not, so far as is known, with any decided success; nor can it be supposed that any remedy will not often show a good proportion of failures in combating a disease such as this. It is enough to say that these agents are known to be good antiseptics, that their action is harmless when not beneficial, and that they are certainly useful in some cases.

Dr. Phillips spoke of two other cases in which glycerinum boracis had been used. It was dis-

covered that glycerine would take up three times as much boracic acid, so that the solution could be made very strong; but this must be diluted once if used in Siegel's spray. Both the cases were *in extremis*, and died, despite tracheotomy, membrane being found post-mortem in the smaller bronchi.

Dr. O'Connor had notes of about forty cases of diphtheria. He had sometimes used a saturated watery solution of boracic acid, but without special success. The most favorable results were got from a solution of chlorate of potash. He had never seen a case of diphtheria in which, on removing a piece of membrane once, there was no re-formation, though this new membrane might be thinner and more delicate looking than the first portion.

Dr. Longhurst thought that the great point was to be very careful not to irritate the parts affected. Diphtheria was a constitutional disease, and we could not expect much from local applications. We should rather rely on the powers of nature, and see that the patient had lots of nourishment and fresh air. He considered the boracic spray to be good, because it did not irritate.

The President said that persons who adopted local applications generally extolled their own particular remedy. He could not agree with the last speaker, that local applications were of no great moment. Diphtheria was of a decidedly infectious character, and infection must take place locally, even if the disease ultimately became constitutional. As an example of the efficacy of boracic acid, which he was the first to introduce into surgery, the power it had of removing the smell of a putrid onychia was instanced. He had found out that glycerine, by the aid of heat, could be made to dissolve almost any amount of boracic acid. He had used such applications to sores of the nasal and buccal mucous membrane, with favorable results. No doubt the glyceride kept the acid longer in contact with the surface on which it was applied, and this was of great value.

Dr. Goodhart replied that the notion that diphtheria was a constitutional disease, was no argument against the use of local applications, for it was frequently enough this local trouble which was the cause of death.

The question having been raised by the President as to what was meant by the term "constitutional," both Drs. Goodhart and Longhurst said they meant a specific poison, circulating throughout the body and producing local effects.

Embolism in the Spinal Cord.

Cases of embolism of the arteries of the spinal cord are so rare, that the following account of an alleged example of the affection, which we abstract from an article reported in the *Wiener Medizinische Wochenschrift* (Nos. 42 and 43), will probably be read with interest. The patient was a boy aged sixteen years, who, up to June, 1879, was apparently in good health. On the 6th of that month, while at work in the stables, he experienced a sharp pain in the thighs, which traveled thence upward toward the gastric region, and, backward to the corresponding portion of the back. Paralysis of both lower extremities, of the vesical and rectal functions, and complete cutaneous anæsthesia of both lower extremities and loins, dated from that time, and for three days and nights severe neuralgia affected the lower extremities. According to the mother's account a deep blue discoloration of the skin about the sacral region was to be seen on the first day after the sudden onset of the disease; and after three or four days a slough appeared, which spread in depth and breadth, till, on his entry into the hospital, it was about two hands'-breadth in size, and laid bare the bone. Similar sloughs appeared, in the course of the next two weeks, over each trochanter major. Four weeks after the beginning of the disease the legs were œdematous. The state on admission to the hospital fully confirmed the account of the previous history. The patient was much wasted and anæmic; there was no sign of cardiac disease. There was no excurvation or irregularity of the vertebral spinous processes, *i. e.*, no sign of disease of the spine. The muscles of the arms were much wasted; both the biceps muscles were tolerably strongly contracted, but with this exception there was no real impairment of movements in the upper parts of the body. Anæsthesia of the lower limbs existed in front as high as Poupart's ligaments; behind, as high as the last ribs. The muscles of the lower limbs were absolutely paralyzed and completely atrophied. The patient could not sit up. No plantar or knee "reflexes" could be got. The urine, which flowed away continually, was cloudy, alkaline, ammoniacal, and contained a trace of albumen, with a sediment of epithelial pus-cells and crystals of triple phosphate. There was no spontaneous action of the bowels.

There was but one rigor, on October 14th, 1879—temperature then 106.5° Fahr.—otherwise there was continued fever, fluctuating between 100.5° and 104° Fahr. Death ensued on October 18th.

At the autopsy some areas of softening in the cortex and underlying white matter of the cerebrum, mostly about the size of a pea, were seen; the whole of the lumbar region of the spinal cord was soft and almost fluid; in both these situations Gluge's corpuscles were found, and the vessels were plugged with tough fibrin. The kidneys were diseased, and there were signs of old infarcts in them. The spleen showed some recent hemorrhagic infarcts. There were vegetations on both flaps of the mitral valve.

The diagnosis of the case during life was one of extreme difficulty. Dr. Weiss, under whose care the patient was, passed carefully in review the causes which would explain the symptoms. Acute myelitis, hemorrhage within or without the spinal cord, embolism of the spinal arteries, successively presented themselves for consideration. Against the notion of embolism was the circumstance that no sign of heart disease was discovered during life. That thrombosis of the vessels existed there can be no reasonable doubt, but it must be a question, considered theoretically and scientifically, whether the plugging of vessels observed was primary or secondary. The fact that large granular cells—so-called inflammatory corpuscles—were found in the softened

tissues is held to be sufficient evidence that the *ramollissement* was a real pathological one. The presumption, it is fair to admit, is greatly in favor of the notion that the case is one of embolism, seeing that evidences of that process existed in the kidneys and spleen, and probably also in the brain.

Severe Injury to Pelvis and Right Kidney.

Mr. Harry Lupton reports the following case in the *Lancet*.

A man aged 69 was run over by a timber wagon, loaded to some three tons; the wheel passed between his legs, went over his pelvis and over the body above the left ilium. On admission to hospital (three hours after injury) he was suffering from shock, pulse small and weak, extremities cold, bathed in cold sweat; chief pain referred to ramus of left pubic bone. Vomiting continued until the next morning. The vomit consisted of a dark, bloody fluid, in small quantities at a time. He had passed water about an hour before the accident, and had no desire to micturate since. Although there was no history of previous stricture, a catheter could not be passed. The patient was supported with brandy and beef tea. The next day there was still retention of urine and no evidence of distended bladder; no odor of urine in breath, and no coma. On the night of the second day the scrotum became so much swollen that a number of punctures were made, from which a considerable amount of blood-stained serum drained away. He became weaker; temperature slightly below normal; perfectly conscious; no evidences of peritonitis at any time; had hiccough, and at 3.30 A.M. on the third day after admission nausea and vomiting returned, and at 5 A.M. he died. The autopsy revealed a collection of serous fluid, distinctly not urine and free from the slightest urinary odor, below the visceral fold of the peritoneum. The pubic bones were separated (not fractured) at the symphysis, for about 2½ inches. The whole of the fundus and anterior wall of the bladder had simply "gone;" about 2½ square inches of the posterior wall was all that remained of the organ. The left kidney was uninjured, the right was deeply bruised and its supra-renal body crushed and torn. The man must have been mistaken about the direction taken by the wheel. In this case there must have been absolute suspension of the renal functions for nearly three days.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a reprint of a paper read before the Illinois State Medical Society, Dr. Edward W. Jenks, of Chicago, gives a critical review of the advance of surgical gynecology in 1881. It is a careful epitome of this branch.

——A description of a case of dermoid cyst of the orbit appears in a reprint of a paper, by Dr. Henry Y. Cornwell, of Columbus, Ohio. It is accompanied by a wood-cut of the face, showing the deformity.

——Dr. Alfred K. Hills, of New York, has sent us a reprint of an article "On the Therapeutic Use of Alcohol." He writes from the homœopathic point of view, but does not limit his doses to those usually prescribed by that school. He thinks it is a valuable therapeutic agent in many diseases. We rarely can give our hearty assent to homœopathic therapeutics, but when Dr. Hills says, of Tendency to Suicide, that "*Aurum* is an excellent remedy for this mental condition," we entirely coincide; only, instead of infinitesimal doses, we think United States double eagles, *ad lib.*, would generally prove more successful.

BOOK NOTICES.

A Treatise on the Practice of Medicine for the Use of Students and Practitioners. By Roberts Bartholow, M.D., LL.D., etc. Third edition, revised and enlarged. New York: D. Appleton & Co., pp. 918.

The popularity of Dr. Bartholow's work has been such as to prove that in the plan of its preparation he has suited the wishes of a large part of the American profession. The wide reading of the author has been supplemented by an extensive clinical experience, and he has the ability to present the results of both in a clear and attractive style. Moreover, he has a quick eye for the novelties in medical art; he appreciates the ardent thirst for improved methods of treatment, and the earnest desire for prompt and positive successes, which are characteristic of the better class of American physicians. These traits he understands and addresses, and hence his book is one which is willingly read.

The present edition is larger, by about fifty pages, than the previous one, and the text has received a general revision. A few points have occurred to us, in looking over its pages, which still require expansion. Nothing is said, for instance, of the remote sequelæ of sunstroke, a subject of considerable importance. The later researches on dengue are not noticed, though several valuable contributions to our knowledge of this disease have been made within the last two years.

There are not many such lacunæ. As a rule, the reader will find what he looks for, and the later as well as the standard views of disease and its treatment are judiciously presented. We have no doubt the volume will continue to enjoy its popularity, and it merits its success.

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MARSH FEVER IN ATHENS.

In a paper read by Prof. Caramitzas at the Athens Congress, he states that that capital suffers much from marsh fever. Thus, among the 34,471 cases of disease treated at the Athens Polyclinic during 1860–70, there were 10,373 cases of marsh fever. This statement recalls to mind the fact that the indefinite disease called malaria, marsh fever, and the like is, in our day, particularly prevalent in cities that have been in times long gone, centuries ago, great centres of population, where hundreds of thousands, yes millions of human beings have lived and died. Witness, for instance, Rome, the hotbed of so-called malarial diseases. The practical hint to be derived from this fact is possibly a significant one. Would it not be well for our searchers after the cause of these indefinite diseases to direct their researches so as to determine whether the results of the decomposition of the body of man may not have more to do with their production than is at present accredited to it? The researches that have been so far made on the cause of *malaria* have been so unsatisfactory that none of them now receive the approval of the universal profession.

May this not be due to the fact that we look in the wrong direction for our solution? If it required many hundreds or thousands of years for nature to accumulate the geological formations that exist to-day, may it not be that in thousands of years she has so influenced the soil under her control that she has, by certain chemical changes, so impregnated it with the results of human decay that, when exposed to the air inspired by human beings, it may cause these indefinite diseases?

The fact that these morbid conditions are so prevalent in the class of localities referred to, would seem to lend some force to this idea.

Of course, we realize that in the economy of nature, human decay furnishes vegetable life, and so the cycle of interchange is maintained.

But where we find this so-called marsh fever most prevalent, as in the Roman Campagnas, we also observe that the process of human decay far exceeds the vegetable production. A barren

waste, once thickly populated and therefore naturally saturated with the products of human decay, is now comparatively uninhabited.

There is not a proportionate *vegetable* demand for the *animal* refuse; some of it remains, and in time, undergoing changes about which we are yet ignorant, produces a condition of the soil favorable for emanations, under certain undefined atmospheric conditions, which are capable of producing the so-called malarial or marsh fevers.

We know full well that decomposing organic matter in the vicinity of human beings will produce that indefinite condition of ill health to which some physicians are so fond of applying the term "*malaria.*" Why may not, then, these same agencies, in the course of time, have evolved such conditions as to cause more definite phases of disease in those who inspire the atmosphere contaminated by emanations from such a soil.

The practical point we desire to suggest is, whether it would not be productive of more practical good for our original investigators to direct their researches toward the influence in producing disease that may be exerted by the changes in the soil produced by the remaining in it for centuries of decomposing human bodies.

May not our various specific diseases be made epidemic every now and then by some such cause? If an epidemic of smallpox gives to the soil a manure of smallpox patients, may not the soil, in time, give back to its consumers a crop of the disease? Who can say positively to the contrary? Every once in a while, long interred bodies are exhumed, as when the encroachments of a city or other reasons necessitate the removal of a cemetery.

Since we have no law against vivisection in this country, might it not be possible that some valuable results could be obtained by utilizing some of the remnants of these long dead bodies, and the soil surrounding such, in inoculating animals.

We know that those dead of certain diseases retain their power of infection for some time; do we know that this mysterious power may not be communicated to the surrounding earth, and thus constitute a latent source of epidemics, ready to spring into activity on some suitable provocation? May not the habit of cremation, prevalent in Rome in early times, have had for one object of its institution the idea that bodies dead of disease were capable of transmitting disease through the soil to the living, and that by *burning* such power was destroyed?

All that we have said is, of course, only theory, but it is a theory worthy of consideration.

So far we have been on the wrong track, we fear, in our minute investigation of the etiology of specific diseases, as evidenced by the fact that we have no more positive knowledge than our forefathers possessed.

The most plausible theory of the causation of acute specific disease is that based on chemistry, and with such our suggestions are entirely compatible.

MEDICAL MALPRACTICE.

From the daily press we learn that in the Supreme Court, on November 27th, an opinion of Justice Sterrett was filed, reversing the judgment of the Common Pleas Court of Susquehanna county, in the case of Charles E. Gere against Umstead & Bailey.

The defendants were partners in the practice of medicine and surgery, and in January, 1879, they undertook to treat Mr. Gere for a compound fracture of one of his legs. Gere had sustained a serious injury, by reason of having been run over by a loaded wagon. The doctors attended him continually for about ten weeks, and were then discharged. The limb was saved, but in such a shortened and deformed condition as to partially deprive Gere of its use. Gere then sued the doctors, claiming that they were negligent and unskillful in the treatment of the injured limb, and that, for this reason, it was not as fully restored as it should have been, while he also claimed that his personal suffering was unnecessarily increased. During the trial the injured limb was shown to the jury, and testimony concerning its treatment was rendered by numerous physicians. The jury rendered a verdict

against the doctors, but they appealed to the Supreme Court, claiming that the cross-examination of a certain doctor who was called as an expert was not properly conducted. The Supreme Court sustained the appeal of the doctors and reversed the judgment of the Lower Court.

It gives us pleasure to record this act of justice to our profession.

The public are altogether too ready to institute suits for mal-practice, and unfortunately we have some mean, sneaking curs in our ranks, who are all too ready to instigate the same.

It is a well known fact, stated by all authorities, that in compound fractures, shortening and deformity will sometimes occur, in spite of the most skillful treatment, and, in fact, such cases, with subsequent suits at law for damages, have occurred in the experience of the most eminent surgeons of this country.

When a high court of law sees fit to acquit a surgeon of such a grave charge the damage done to his character is but half repaired. The misled or wilfully vindictive prosecutor or plaintiff should in some way publicly be censured, in order that the community that has heretofore placed confidence in this particular surgeon may have their wavering faith made once more firm, not only by a mere acquittal of actual mal-practice, but by a condemnation of the mean spirit of want of appreciation of services rendered which this growing evil of mal-practice suits shows to be so rife.

MR. SEYMOUR HADEN ON AMERICAN PHYSICAL DEGENERACY.

In a recent issue we had occasion to animadvert rather severely upon what we considered to be a hastily and erroneously formed opinion of Mr. HERBERT SPENCER, concerning the physical deterioration of Americans. We are glad to see that another of our distinguished English visitors, one who, by virtue of his profession, is probably better calculated to form a trustworthy opinion than the great philosopher, has reached a different conclusion.

Mr. SEYMOUR HADEN is a distinguished English surgeon who, by devoting his spare time to the pursuit of art, has come to be recognized, the world over, as the finest etcher of modern times. He, too, was dined and wined by the Lotos Club, in New York. During the course of his after-dinner speech he took occasion to refer to Mr. SPENCER'S address, at Delmonico's, and said:—

"Strange to say, that very reputation for energy which has been found fault with by Herbert Spencer, has been a great attraction for me, in the visit which I am now paying you. I only wish that we had a great deal more of it on our side of the Atlantic. I disagree *in toto* with Mr. Herbert Spencer. It has been my business and my pleasure to see the effect of work, and to judge of it, and I can honestly say that I never saw, in all my professional career, the least injury to life or health result from what Mr. Spencer calls overwork. Only the other day, just before I left England, I was met in consultation by one of the most eminent physicians in London, Sir William Gull. The case before us was that of a man who was said to be suffering from overwork. I asked Sir William Gull if he had ever met with a case of mischief or injury arising from this cause, and he said he had not. So for once, at least, the doctors agreed."

NOTES AND COMMENTS.

Decolorization of Hair Associated with Neuralgia.

The *Medical Times and Gazette* says that M. Raymond relates the case of a lady of 38, who was suffering from neuralgia of the scalp. After suffering several days the pain became much worse one evening, and morphia was powerless to relieve it. At two o'clock the next morning the pain was at its worst. At this moment the hair had its normal color; at seven o'clock the same morning it was found that her hair was almost completely decolorized." It is remarkable that at first the greater part of the patient's hair became red, turning to white a few days later; and later still, falling off in considerable proportion. The case affords an absolute contradiction to Kaposi's theoretical view that blanching of the hair can never take place very rapidly, but *must* require several weeks for its completion.

Borax in Epilepsy.

Dr. Stewart Lockie reports, in the *British Medical Journal*, the case of a boy of seventeen who had been subject to epileptic seizures for four years. At the time of admission to hospital they occurred about once a week. Bromide of potassium seemed to have some slight controlling influence at first, but the frequency soon re-

appeared. On Nov. 28th, 1881, borax, in fifteen-grain doses three times daily, was substituted for the bromide, and it has been continued, with an intermission of nine days, during which the bromide was renewed, to this date (Oct. 21, 1882.) From the time it was commenced no serious fit has occurred, and for the last six months he has had no seizure whatsoever. No skin eruption occurred; vomiting took place occasionally, if the medicine was taken before meals, and at one period he complained of sleeplessness.

Rheumatic Nodes.

It has been a very doubtful question whether rheumatic affections are capable of producing nodes. The various systems of surgery are remarkably reticent on the subject. The case recently reported in the *British Medical Journal*, by Dr. George Mahomed, will therefore prove a valuable contribution to the literature of this subject. In a single woman, aged 54, who was much crippled by subacute rheumatism, he noticed on the inner surface of the right tibia, about two inches above the ankle-joint, a vaguely defined, doughy swelling, tender to touch, which was always more painful at night. That the swelling was not due to syphilis was inferred from the facts: 1. Of an intimate acquaintance with her history, and, 2. That it did not improve under specific treatment.

Treatment of Neglected Sprains.

Dr. H. A. Latimer, in the *British Medical Journal*, reports the case of a man suffering from an old sprain of the ankle, of fourteen years' duration. Owing to its being painful, he saved the affected foot and leg as much as possible, resting his weight, when standing, principally on the sound foot. To such an extent did he do this that the muscles of the affected limb commenced to atrophy. Forcible flexion and extension of the joint was made; it was painted with iodine, ammonia liniment was rubbed in daily, electricity twice a week, and he was ordered to use the limb as much as possible. In three weeks time a perfect cure resulted, which has been permanent.

Congenital Absence of Kidney.

The *Medical Times and Gazette* says that Dr. Turbin, of Tiflis, records the congenital absence of the left kidney in a man 60 years old. The ureter on same side was absent. The author was able to gather only 8 cases; in 5 the left and in 3 the right was wanting.

Apparatus for the Treatment of Pelvic Cellulitis.

Acting on the principle taught by surgery, that the best way to produce absorption is by compression, Dr. Pallen described his apparatus for producing compression in pelvic cellulitis, at a recent meeting of the Obstetrical Society of New York (*Am. Jour. Obst.*): The instrument consists of a double water bag, made of rubber, to rest over and below the iliac fossa on either side, and admitting of the use of a greater or less amount of hot water pressure, according as the case might indicate. Counter-pressure could be made from within and below by the introduction of soft clay into the vagina with the patient in the genu-pectoral posture. He had treated seven cases by this method, and the result in two had been very satisfactory. Of the other patients, two did not carry out the directions, two were still under observation, and one had been only five days under the remedies.

Pilocarpin in Polyuria.

In a recent memoir (*These de Paris*), M. Dugroux asserts that pilocarpin by hypodermic injection, in the dose of one-sixth to one-third of a grain, has proven successful in some forms of polyuria.

It brought about complete cure in two cases of azoturic polyuria, the one essential and the other symptomatic of interstitial nephritis; in this last case it also caused the disappearance of very marked amblyopia. In two cases of simple polyuria, it caused a notable amelioration of the general symptoms.

It proved unsuccessful in a case of polyuria in chronic saturnine poisoning, in a chronic case of simple polyuria, and in a case occurring to a patient in an advanced state of scrofulous cachexia.

A Tack in the Ear.

Dr. Edward Haughton reports the following case in the *Lancet*:—

A lady consulted me for deafness and occasional throbbing in the right ear, and on examination with the ear speculum I found a black mass on the bottom of the meatus. Being firmly imbedded in a mass of clotted blood, wax and cotton-wool, it resisted all attempts at removal by the use of a large syringe and hot water; but by the aid of a small artery forceps and a short hook, set in a handle, I succeeded in extracting a carpet-tack, head foremost. As the mass completely plugged up the meatus (in which it had been for years), it was very difficult to extract. She now hears perfectly.

Boro-Glyceride.

Boro-glyceride, which has been so highly lauded in England as an antiseptic, and has been recommended as an application to indolent syphilitic ulcerations, is prepared as follows:—

Glycerine is heated to a high temperature, and boracic acid is added as long as it dissolves, the proportion being ninety-two parts of glycerine to sixty-two of boracic acid. When this is allowed to get cold, a white crystalline compound is formed, which disappears on further heating. Water is evolved during the whole of the operation, and at last, when the steam ceases to be given off, the mass sets into a hard, ice-like substance, and is found to have lost in weight exactly fifty-four parts, which corresponds to the weight of three molecules of water.

Persistent Hiccough.

At a recent meeting of the Saint Louis Medical Society (St. Louis *Medical and Surgical Journal*) Dr. Barrett reported the case of a healthy man, thirty-five years of age, who, with the exception of two or three hours, had been troubled continuously with hiccough for five days. Various remedies had been tried without avail. Several other cases were reported by different members of the Society, in one of which the patient, a healthy man, had been so troubled continuously for ten or twelve years. In view of the annoyance which this trouble gives, and the seeming inefficiency of drugs to control it, any successful results obtained would be valuable.

The Best Material for Ligatures.

In the course of an article on "The Choice of Material for Ligature of Arteries in their Continuity," read in the Surgical Section of the British Medical Association (*Brit. Med. Jour.*), Dr. Bennett May discussed the various kinds of ligatures, and related his experience with them. His conclusions are that stout, common gut, of good quality, improved by long keeping in carbolic oil, is a material for ligature which leaves little or nothing to be desired.

Maggots in Fæces.

A correspondent writes to the *British Medical Journal* that he was called upon to attend a boy, aged 10, who had been out of sorts for some time. He was pale, anæmic, and had a foul breath. He finally passed a scybalous mass of fæces swarming with maggots. A quantity of butter in use in the house was found to contain maggots, and this, no doubt, was the origin.

Vaginal Ovariotomy.

Dr. W. H. Baker reported a case to the Boston Society for Medical Observation (Boston *Medical and Surgical Journal*). The patient was placed in Sims' position, the posterior cul-de-sac opened, and the cyst drawn down to the vaginal incision and opened.

The writer's conclusions were that abdominal ovariotomy was always to be preferred to vaginal, except in the few cases (1) where the cyst is small and the contents bland, so that there will be little danger of any, and especially of septic, matter escaping into the peritoneum; (2) of dermoid cysts small enough to be removed by the vaginal incision without evacuation.

Recovery After a Broken Neck.

Dr. C. Jordison reports the following case in the *Lancet:* A man aged 38 received a fracture of the laminae of the 5th and 6th cervical vertebræ. There resulted almost general paralysis. The treatment consisted in absolute rest. He commenced to regain muscular power in three days; at the end of the sixteenth week he was up and walking about, and at the end of the twenty-fifth week he was riding, driving, rowing and swimming, and with the exception of a slight weakness in the left arm, was perfectly well and strong.

Coma During Menstruation Relieved by Venesection.

Dr. H. Goldthwaite reported the following case to the Obstetrical Society of New York (*Am. Jour. of Obst.*): A woman suffering from uterine retroflexion and version suddenly passed, during menstruation, into a state of coma, without any apparent exciting cause. Various remedies had no effect. Finally venesection was resorted to, when she at once began to regain consciousness, and went on to complete recovery. Examination of the urine gave negative results, and there had been no renal symptoms. She had never before lost consciousness.

Imperfect Development of Genital Organs.

At a recent meeting of the Obstetrical Society of Dublin (*Am. Jour. Obstetrics*), Mr. Horne showed a specimen taken from an eight months' child, which only survived a few minutes after its birth. There was an almost total absence of genital organs, except what appeared to be the rudimentary traces of a penis. There was a complete absence of anus. High up in the child's back there was a small pin-hole, but it did not go deeper than the skin.

Special Reports.

NO. XI.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.

(*Continued from page* 642.)

The Progress of Ophthalmology During the Fourth Quarter of the Year 1881, by H. Magnus, Breslau; C. Horstmann, Berlin; and A. Neiden, Bochum; and others.—*Archiv. Ophthal. vol. xii, No.* 2.

Translated by Dr. F. E. D'Oench, New York.

Javal. *Eclairage électrique au point de vue de l'hygiène de la vue.* Soc. de Mèd. Publ. de l'Hygiène Professionelle. Séance du 26 Oct., 1881. *Progr. Méd.* No. 51. Javal hopes that the use of electric light may become universal. If the necessary precautions are observed, especially in the use of goggles, the eye is not endangered. In place of blue or gray goggles, Fieusal recommends yellow ones, as they absorb the violet rays more completely. Mesmil argues agaiust the electric light.

Reich. *Israelites and Military Service. Med. Zeitung,* No. 9. In fifteen cases, all of them Israelites, a traumatic cataract had been intentionally produced, in order to escape military service.—*Hirchmann.*

Weber. *Examination of the Eyes in the High Schools of Darmstadt.* Appendix to the Medical Report of the Grand-ducal Ministerial Department for the years 1877–80. Darmstadt, 1881.

The author treats the subject very thoroughly, and comes to the following conclusions: 1. In view of the injurious results of poor illumination, the windows, where skylights cannot be introduced, should not extend lower down than the height of the scholars when standing upright; where there are windows already, they should be provided with ground glass up to this height, on the south and west sides, in their entire extent; rooms for drawing and female handiwork should be lighted from above. In view of other demands connected with the question of illumination, a revision of the laws governing the building of schools, based on the principles of hygiene now established, is urgently advised. 2. In view of the attributes of a good school-bench set forth, the introduction of Lickroth's school bench, with a top 50 cm. broad, is to be ordered; for drawing and female handiwork, they should be replaced by other apparatus. 3. In view of the different size of the scholars of the same class, they should receive seats corresponding to their height, as determined at the beginning of each term. 4. In view of the necessity of sufficient ventilation, and the injurious influence of long-continued sitting, and its insufficient neutralization by play, as proved by statistics, instruction should be limited to three quarters of an hour at a time, and the remaining fifteen minutes be devoted to gymnastic exercises, drilling, etc. 5. In view of the injurious influence of poor carriage of the body, the teachers are instructed to see that the distance between eye and work is at least 35 cm., and that there is always the necessary amount of light, to be determined by appropriate trial plates. 6. In view of the injurious influence of poor material, all printed matter not in accordance with the principles established in respect to it should be discarded, also checkered blank-books, plates, models for drawing, printed charts, and too fine needlework. 7. In view of the injurious influence of sewing of all kinds on children not at least ten years old, and in view of the necessity of stricter mental occupation at this age, a complete reform of this instruction is demanded. 8. In view of its mentally as well as physically injurious influence, the present system of penmanship should be replaced by a round-hand form. 9. In view of the unprofitableness of dictation, it should be forbidden from principle, and only allowed for the shortest notes. 10. In view of the necessity of constant medical control over the hygienic postulates of the school.

Dufour. *Transplantation of the Conjunctiva.* Transac. of the Intern. Med. Cong., London, viii. *Rev. Méd. de la Suisse Rom.*, 1881, No. 10, Oct. 15. The human conjunctiva may be replaced by that of the rabbit; also by other mucous membranes. There must be no bleeding of the spot upon which the mucous membrane is transplanted. Great care must be taken in applying the sutures; it is best to insert them into the patch before transplanting it. Dufour did not observe any shrinkage of the transplanted piece of mucous membrane. It is not advisable to use salicylic acid during or after the operation.

Förster. *Some Improvements in the Operation for Senile Cataract. Schlesische Gesellsch. f. Vaterländische Cultur*, Oct. 18, 1881. Breslau, *ärztl. Zeitchr.*, 1881, No. 24, and Rep. on the thirteenth meeting of the Ophth. Soc. at Heidelberg. When the cataract ripens slowly a squint hook, after previously making an iridectomy, should be passed over the cornea several times, pressing and rubbing upon it; the corticalis, being not yet entirely opaque, is thus broken up within the capsule. The capsule should not be opened with the cystotome, but with a fine forceps, as in this way the greater part of the anterior half of the capsule may be removed from

the eye, thus diminishing the danger of subacute iritis, of irido-cyclitis. Carbolic acid for disinfecting the eye or the instruments should be discarded. The instruments, however, should be disinfected in absolute alcohol before the operation. Not much weight is attached to disinfecting bandages.

Brettau. *The Local Application of Iodoform.* Report of the thirteenth meeting of the Ophth. Soc. at Heidelberg, 1881. Iodoform not only seems to cause irritation in diseases of the conjunctiva and cornea, but also seems to diminish the secretion of the conjunctiva, to bring about retrogressive changes in granulations, and to act beneficially in sclerosing keratitis. It is used in form of a powder, or as a salve in equal parts with vaseline.

Carreras-Aragó. *Pilocarpine in Diseases of the Eye. Revista de cienc, Med., de Barcelona.* Report C. f. A., p. 341. Its use is indicated in all affections in which an energetic contraction of the pupil is desired; for instance, in conical ulcers threatening incarceration of the iris. *Success slight in detachment of the retina.*

Josso. Paris, 1881. Doin, 60 pages. Out of sixteen cases, fifteen were successfully treated by subcutaneous injections of pilocarpin. Compare the less favorable results obtained by Carreras-Aragó precisely in regard to this point.

Kauders. *Pilocarpine as an Antidote of Atropine. Wiener Med. Wochenschr.*, 1881, No. 45. Pilocarpine is a speedily acting and sure antidote of atropine.

Krömer. *On the Use of Antiseptic Solutions of Atropine and Eserine. Correspondenzblatt f. Schweizer Aerzte*, 1881, No. 19. Boiling the solutions, and adding boracic acid 4 : 100 and carbolic acid 1 : 1000, keeps them clear and free from the development of bacteria.

Königstein. *Notes on the Histology of the Eye. Graefe's Arch.*, Bd. xxvii, 3. 1. The nerves of the sclera. The human sclera has nerves of its own ending within it. 2. The pupillary membrane. It consists of four to five larger blood vessels, forming arches; numerous small blood vessels, coming from the iris and communicating with each other, empty into these arches. The centre of the pupillary membrane is always free from blood vessels. The blood-vessels of the pupillary membrane do not come from the circulus iridis minor, but in conjunction with the blood vessels of the ciliary muscle and ciliary processes from the ciliary blood-vessels. The retrogressive change begins toward the end of the 7th or the beginning of the 8th month.

Cahn. *The Physiological and Pathological Chemistry of the Eye. Beitschr. f. Phys. Chemie.* Bd. v. p. 214. The reaction of fresh retina is genrally alkaline; on the external surface sometimes acid. The retina of the ox contained water 86.52; albuminous substances 6.77; substances resembling albumen 1.59; alcohol extract 0.25; aqueous extract 0.42; cholesterine 0.77; fat 3.47; lecithine 2.03; soluble salts 0.93; insoluble salts 0.02; traces of cerebrine. There is no essential difference between the chemical composition of the aqueous humor and the vitreous. The lens consists of globuline. In cataractous lenses a decrease of albumen could be demonstrated, as also the coagulation of a portion of the albumen.

Denissenko. *Investigations on the Nutrition of the Cornea. Virchow's Arch.*, Bd. lxxxvi, 3. 1. The cornea does not draw its nourishment from the anterior chamber (Knies, Ulrich), but from the surrounding blood vessels in the sclera. Therefore, the cornea is nourished in the same manner as every other tissue of the body. 2. Although the blood vessels nourishing the cornea are situated in the sclera, at some distance from the sclero-corneal margin, the nourishing fluid, after leaving them, is conducted through the fibres and fissures of the sclera to the corneal margin, where it enters the lacunar system, and is distributed throughout the entire thickness of the cornea, and then discharged into the anterior chamber. 3. The current does not flow from the centre to the periphery of the cornea (Knies, Ulrich), but from the periphery to the centre (Cohnheim, Szokalski), and not from behind, forward (Knies, Ulrich), but from in front, backward. 4. Therefore, the stomata, which Klebs and others have demonstrated in the epithelium of Descemet's membrane, do not form the commencement of Recklinghausen's lymph spaces for drawing nourishment from the anterior chamber, but serve to discharge the waste products. 5. This shows that the cornea does not draw its sustenance from the anterior chamber, but that, on the contrary, the waste products are discharged into the anterior chamber. 6. It therefore follows that the anterior chamber is an enlarged duct for discharging the aqueous humor. 7. Therefore it may be said that not the anterior chamber nourishes the cornea, but the cornea the anterior chamber.

Schmidt-Rimpler. *The Empiric Theory of Vision. Sitzungsber, der Gesellch. zur Beförderung der ges Naturwissensch. zu Marburg*, 1881, No. 4, Dec. A child, three years old, had forgotten its sight so completely, in consequence of an acquired opacity of the lens, that after being successfully operated, it had to learn to see

again. This is against the view of Dubois-Reymond, according to which the ability to interpret correctly the impressions on the senses is not exactly congenital, but comes suddenly, the child not being taught by experience, in the way assumed by the empiric theory.

Frankhauser. *Examination of the Scholars of the High School at Burgdorf for Color Blindness.* Ann. Rep. of the high school at Burgdorf, at the close of the school year 1880–81. Holmgren's and Pflüger's methods were employed. Stilling's plates are not always reliable, and can, therefore, not be recommended. Red-green blindness was found in 6.2 per cent. out of 177 scholars; 44 made mistakes, though not color blind. It is advised to cultivate the color sense at school; the system of Magnus was used for this purpose, with good results in general.

Lagethschnikoff. *A Rare Case of Elephantiasis Palpebrarum. Med. Uebersicht*, Bd. xv, p. 894. Both lids are very much enlarged; the upper hangs down to the nasal angle. The disease began in early childhood. (Hirchman.)

Mandelstamm. *A Case of Sarcomatous Ectropium*, with some remarks upon Trachoma. *Arch. of Ophth.*, Bd. xxvii, 3, p. 101. From the condition of the ectropionized lids, the author concludes that the tendency of the epithelium of the conjunctiva to become hypertrophic is great, not only when directly exposed to the air, but also when, in consequence of unknown injurious influences (dust, smoke, scrofula, barrack air, etc.), trachoma develops. The hypertrophy of the epithelium, together with the hyperplasia of the adenoid tissue, is of primary importance in trachoma; perhaps the pertinacity of the disease may be ascribed to it. When the hypertrophy has once begun, it can cause, at any time, fresh irritations of the adenoid tissue.

E. Grüning. *Traumatic Ophthalmoplegia. Med. Record*, Nov. 12. All the muscles of the left eye were paralyzed by a blow of the fist. The O. N. showed no alteration with the O. S., but there was total blindness. G. thinks there must have been fracture of the pyramid of the orbit, with laceration of the optic nerve. (Swan M. Burnett.)

C. Higgens. *On Distention of the Frontal Sinuses. Guy's Hosp. Reports*, vol. xxv, 27, 1881. A report of four cases in H.'s practice, with critical remarks and citation of published cases and opinions. In case 1, M., 32, there had been abscess in the same place at age 7, and injury followed by removal of dead bone from same place; age 16, tumor noticed eight months. Case 2. M., 13, no injury, swelling noticed six months. Case 3. F., 19, no injury, tumor eight months. Case 4. M., 36, age 14, was kicked over his eyes; age 29, another injury by iron bar over orbit. Pain in L. supra-orb. region began two years later, together with some ptosis, and pain at pulley of supr. oblique. No swelling till three and-a-half years, after which he first was seen, or five to six years after second injury. All treated by free incision and establishment of an opening from floor of distended sinus into nose; result good in all. Remarking on the difficulty of diagnosis in this disease, H. makes the important, and probably new observation, that the swelling (when it has caused absorption of bone) varies in size at different times of day, being smaller after lying down for some hours; *it always points above the tendo oculi.*—*E. Nettleship.*

Kramosztyk. *A Foreign Body in the Orbit. Gaz. lekarsk*, 1881, p. 76. A man 45 years old was attacked with typhoid fever, shortly after having received a blow from the shaft of a wagon. The whole time he was ill he complained of severe pains in the eyes. Three months later slight blepharospasm developed; the eye was deflected inward considerably. There was a small ulcer at the upper inner margin of the cornea, next to which a foreign body, firmly imbedded, was detected by the probe. It was extracted with difficulty and found to be a piece of wood six cm. long. The canal in which it lay had a smooth cicatricial surface, and bone was exposed. The convergent squint was caused by formation of this canal, which extended inward along the internal rectus muscle. Vision was not perceptibly reduced.—*Hirschmann.*

Jsarkiewicz-Ndko. *Cases of Lesions of the Eye, of Traumatic Origin. Gaz. lek*, 1881. After an insignificant injury an inflammation of the orbital tissue set in, which led to the formation of an abscess. The abscess was opened, and a temporary improvement ensued, though there was soon a relapse. The patient, who went elsewhere, was treated expectantly. Three weeks later a second abscess opened spontaneously, and all the symptoms of disease disappeared. The eye, however, was totally amaurotic, showing atrophy of the optic nerve. It follows, therefore, that in abscesses of the orbit an active, not a waiting, treatment must be adopted at an early date.

Berlin. *A Case of Injury of the Optic Nerve Through Fracture of the Optic Canal. Ber. über de* 13, *Vers. d. Ophth. Ges.*, p. 81. The author observed, at the autopsy of a suicide, a fracture of the optic canal, which had severed

the nerve, not only within the canal, but also within the brain.

J. R. Wolfe. *Aneurism of Orbit (Pulsating Exophthalmus) Following Injury Cured by Ligature of Common Carotid. Lancet*, Dec. 3, 1881, (ii, 945). F., 22; symptoms began three months after a blow on left eye, with pain and beating in the head, slight proptosis and bruit heard in orbit; eight months after injury, proptosis greater; a short, pulsating tumor near inner canthus, with thrill and puffing bruit; pulsation stopped by pressure on parotid; papillitis, with extreme venous engorgement. Vision somewhat defective; ulceration of cornea. Ligature of common carotid by Dr. Foulis, eight and a half months after injury; full antiseptic precautions and catgut ligature. Pulsation stopped and tumor much diminished. S. recovered perfectly and O. D. cleared. Four weeks after operation only slight proptosis (E. Nettleship).

Skrebitzky. *Case of Anophthalmus, with Congenital Cysts in the Lower Lids. Klin. Monatsbl. f. Augenhk.*, B., xix, p. 423. In a child six months old, otherwise healthy, and with a normal skull, the orbit was found absolutely empty. Globular tumors of the size of normal eyes protruded upward beneath mucous membrane of the lower lids; fluctuation was easily perceptible. Either they were cysts of the lower lids or malformed eyes.

Kranhik. *The Cause of the Diseases of the Conjunctiva in the Army. Wratsch*, No. 10, 1881. The causes are insufficient sleep, drill in the sun, too tight cravats and collars, besides bad air in the barracks, and diseases of irritability of the conjunctiva acquired before serving.—*Hirschmann.*

Fialkowsky. *A Case of Papulous Syphilis of the Conjunctiva Bulbi. Wratsch*, No. 5, 1881. After a syphilitic angina and condylomata at the anus, a nodule resembling a phlytænula developed on the conjunctiva of the globe three to four mm. downward and inward from the cornea, which ulcerated on the fourth day, and disappeared without any local treatment after fourteen subcutaneous injections of sublimate (cgrm. per dose).

Mikucki. *Eserine in Keratitis, Medycyna*, 1881. Mikucki recommends the use of eserine in ulcers of the cornea, especially at the periphery, basing his advice on the clinical history of twelve cases.

Kramsztyk. *Neuro-paralytic Keratitis, Medycyna*, 1881. Kramsztyk discusses the identity of the so-called neuro-paralytic keratitis, with other affections of the cornea which occur in severe forms of the disease, when the patients remain unconscious for some length of time, with eyes half open. They are due to the loss of moisture of the cornea.

Gouvêa Hilario (de Rio Janeiro). *Aniridia Congenita of Both Eyes, with Deficiency of the Ciliary Bodies and Anterior Part of the Choroid.* Transact. of Intern. Med. Congr., London, vol. iii, p. 120. Man, 23 years old; complete absence of iris in both eyes; lenses dislocated upward, so that there is an aphakic space at the lower corneal margin. No sign of the presence of ciliary processes, nor of the anterior part of the choroid, while the posterior part is more or less normal, as are also the blood vessels of the retina.

Hänsell. *Experiments in Vaccinating Syphilis upon the Iris and Cornea of the Rabbit. G. A. f. O.*, Bd. xxvii, 3, p. 93. The experiments were made with the thin purulent contents of a gumma which was still intact. On the twenty-fifth day after vaccination iritis set in in both eyes, together with the growth granulamas resp. papules and gummata in the ciliary body. When only the cornea was vaccinated, several small, very vascular nodules developed. The animal died after six months of marasmus. The lungs and liver were infiltrated with small tumors resembling tubercles. The same result ensued in about four weeks, when the secretion from "plaques muquesses," well known for its high infectious power, or from particles of a still intact sclerosis, was used. A characteristic difference between the syphilitic and tuberculous nodules consists in much greater vascularization of the former, and in the tendency of the latter to caseous disintegration. Vaccinating with lupus produced no result whatever.

Hosch. *Primary Sarcoma of the Iris. C. f. a.*, Bd. v. p. 361. It has developed in a person 66 years old, at a spot upon the iris where a pigmentation of a darker brown has existed ever since his youth. The tumor proved to be a pigmented spindle-cell sarcoma, which had not yet touched the choroid and ciliary body. The author assumes with Knapp the probability of a conversion of the normal pigmented hyperplastic tissue in the neoplasm during the later years of life. The newly formed pigment undoubtedly comes from the blood vessels.

Hosch. *A Case of Gumma of the Ciliary Body. C. f. a.*, Bd. v. p. 365. The author adds six cases which were overlooked by Seggel in his bibliography in (*loc. cit.*) Patient 37 years old; 7 months after infection a rapidly growing tumor developed under violent symptoms of inflammation of the iris and choroid, and soon

reached the size of a small cherry. Energetic inunction (120 grms. of blue ointment and one grm. calomel were used daily) gradually reduced the size of the tumor until it finally disappeared entirely.

Masse. *Pearly Tumors of the Iris. Rec. d'Ophth.*, July, August, 1881. After an injury of the eye combined with a penetrating wound of the cornea, sometimes cysts develop upon the iris, sometimes solid tumors. Many intermediate stages exist between these two varieties, the serous translucent cysts and the epithelial pearly tumors. Some cysts are almost entirely solid and filled with fat and epidermis cells; the pearly tumors also contain epithelial cells, fat and crystals of cholesterine. The want of an enveloping membrane in the pearly tumors, which the author doubts, constitutes only an apparent difference. Masse reports a case of a pearly tumor of the iris, observed by himself, which had developed around three lashes; they had entered the anterior chamber through a wound and lay upon the iris. The author has shown, by experiments upon rabbits, that when the lashes are deprived of the bulbs and brought into the anterior chamber, they do not cause the development of tumors of the iris; these are due to the presence of the bulb or small particles of the epidermis or conjunctiva. After introducing a piece of conjunctiva into the anterior chamber a cyst and pearly tumor of the iris developed in the same rabbit.—*Marckwort.*

Rymarkiewicz. *Polycoria in the Left Eye. Medycyna*, 1881. The normal pupil was somewhat displaced downward and inward. The second pupil was situated slightly upward and outward, was of an oval shape, with a major diameter of two mm.,and a minor of one mm. The pupil of the right eye is slightly dislocated downward.

Priestley-Smith (Sheffield). *Acute Glaucoma Following Concussion, Cured by Eserine. Transact.* of the Ophth. Soc. of the Unit. Kingd. The *Lancet*, No. 25.

Arlt. *Spontaneous Rupture of the Anterior Capsule of a Cataractous Lens. Ber. d. Heidelb. Ophth. Ges.*, 1881, p. 130. A cataract has slowly developed in a myopic woman, 34 years old; seven years earlier detachment of the retina had taken place. The spontaneous rupture of the capsule happened during the night. A linear section was made, and a portion, consisting of cholesterine and fatty lenticular substance, removed. The eye remained good.

Critchett. *Practical Remarks on Cataract The Ophthalmic Review*, vol. i, Dec. 1881, p. 21. C. divides his subject into two heads: 1. Cataract during its period of formation. 2. Cataract when it has so far arrived at maturity as to justify operative interference. The first of these he discusses under the head of "Preliminary Treatment of Cataract." He thinks we are too apt to treat cataract patients merely as subjects for operation, and that, consequently, they are often led to seek the advice of unscrupulous pretenders, who either promise to remove the opacity or to arrest its progress. He recommends a constant surveillance of the case from the time the opacity is clearly made out. He next considers the question as to how far it is expedient to inform the patient of the existence of the disease during its early stages. He concludes that it is impossible to lay down any hard or fast rule as regards this, for each case must be dealt with, as far as the exercise of judgment will permit, according to its own special requirements. With reference to the question as to what can be done for the patient in the way of palliative treatment, C. speaks of good results being often obtained by the employment of stenopœic glasses, with or without magnifying power. As regards the use of atropine, it is impossible to lay down any rule, but as a matter of policy, he indicates discretion in prescribing it, and insists upon the importance of always ordering a weak solution, and never instilling it into both eyes at once. (Fitzgerald.)

Goldzieher. *Ossification in the Periphery of the Lens.* Ber'd. 13, Heidelb. Ophth. Ges, 1881, p. 155. In a globe enucleated on account of phthisis dolorosa, the anterior surface of the lens was found covered with an osseous capsule. Total detachment of the retina and choroid, due to the contraction of the cyclitic tissue.

Purtscher. *Erythropsia after Traumatic Cataract. C. I. A.*, Bd. v, p. 333. The cataract was absorbed spontaneously and completely. The pupil was perfectly black two and a half months after the injury. V = $\frac{1}{3}$. One morning, five months later, he saw all objects red, and this continued for three days. Two weeks later, after being much heated, the same phenomenon, without any ophthalmoscopic changes. V = $\frac{1}{2}$. Report of a second similar case in senile cataract.

Abadie. *Galvano-puncture in the Treatment of Detachment of the Retina. Soc. de Chir., Séance*, Nov. 30, 1881. *Prog. Méd.*, 1881, No. 49, et *Gaz. Hébd.*, Dec. 9, 1881. Detachment of the retina frequently has a local cause; it is, therefore, open to surgical treatment. Abadie recommends galvano-puncture with a platinum knife for this purpose. The sub-retinal fluid is

allowed to escape through an incision, so that the retina can re-adapt itself. The inflammation which then sets in is supposed to fix the retina in its position. Eight cases were treated; six chronic ones, with transient good results; two cases of limited detachment, with "satisfactory" results. As the tension was permanently reduced in these cases after the operation (perhaps without galvano-puncture, from the detachment.—Reviewer), the author thinks of treating glaucoma in this way (Marckwort).

J. Hutchinson. *On Retinitis Pigmentosa and Allied Affections, as Illustrating the Laws of Heredity. Ophth. Rev.*, vol. 1, Nov., 1881, p. 2. After treating of the disease in general, the author reports his experience in regard to the influence of consanguinity upon the development of retinitis pigmentosa. He possesses the data of twenty-three persons or their families. Eight of these sprang from marriages among relatives, among whom there was no record of a previous case of the kind. Three of these patients were partially or completely deaf. In four of the eight cases, only one person was affected; ten times, more than one member of the family was affected; twice, three children; eight times, two children. In ten cases no consanguinity in the family could be proved by anamnesis, and among these, in five cases, two members of the family were affected. The author thinks that consanguinity is undoubtedly an important factor in the development of ret. pigmentosa, as it is for deaf-mutism and idiocy.

(*To be Continued.*)

Correspondence.

Conduct of Labors Made Tedious by Rigidity of the Soft Parts.

Ed. Med. and Surg. Reporter:—

The tedious case of labor detailed by Dr. Farnham, of Maine (see Reporter, Dec. 2, p. 642), is interesting, because it is a condition of things frequently encountered by the practitioner, and which causes him more or less annoyance, in proportion to his experience in such matters. I am encouraged to make a suggestion in reference to the treatment of similar cases, which, if adopted and acted on, may be valuable in favoring tranquillity of mind in the physician, his patient and her friends, and avail much as to their bodily comfort. I recall just such cases of rigid and undilated os and vagina to which I have been called just at the hour named, bedtime. I remark that "this is a case that requires time and rest; I will give you a medicine that brings repose, and favors rather than retards labor." I thereupon administer a full dose of morphia sulphate, and retire to my rest, either at the patient's residence or at my own home, if not too far away. When I see her again after several hours, perhaps the morning following, I find that the short, infrequent and inefficient pains gave way in a short time to sweet and tranquil repose; and, though the pains are again commencing, the patient is refreshed and in good spirits, and the entire household serene and satisfied. On examining, I find the vagina less rigid, somewhat moist, and the os patulous and softer. I reflect on the situation, and, if the os is but partially dilated, and the structures yielding slowly, I may, if pressed for time elsewhere, repeat the morphia and allow the dilatation to proceed undisturbed. The parturient is tranquillized by the assurance that the time for delivery has not arrived, and that it is vain to attempt hastening it by forced bearing down efforts, or by any other measure. When the os is at length fully dilated, the vagina has also become much more yielding, and the patient has undiminished vigor to second the expulsive efforts of the uterus, by bringing into action the assisting voluntary muscles. If these are inadequate to bring the labor to a close, the woman is then in a good condition to bear the strain of manual or instrumental interference.

I think it may be taken as an axiom, that a labor that is tedious because of rigidity of the parts concerned in the delivery, from the inefficiency of the pains, perhaps by the shortness of the umbilical cord, but which is unaccompanied by hemorrhage, convulsions or other serious complications, need not occasion grave solicitude or cause anxiety about the delivery. A wise regulation of the efforts of nature, seconding them when helpful and discouraging them when fruitless; a careful husbanding of strength, and the confidence inspired by the equipoise and self-reliance of the physician, avail much in bringing about a happy result in all cases of tedious labor.

E. T. Blackwell, M.D.

Paterson, N. J., Dec. 6.

Bovine vs. Human Virus.

Ed. Med. and Surg. Reporter:—

In the light of recent experience and careful observation, it would seem no wide thrust at the truth to say that, since the universal substitution of bovine virus for the humanized, smallpox has assumed a perennial as well as a continental character.

In fact, since that mighty iconoclast, æsthetics, landed upon the American shore, many grand old usages of great practical utility have been wantonly demolished, and replaced by "the latest thing," which, in very many instances, has proved to be not the *very best* thing; so has it been with the above; for since the old mode of vaccination from the human crust has been supplanted by the bovine lymph, the difficulty of producing vaccinia has increased ten-fold. The human family (except, perhaps, a few monopolists), seem naturally averse to protection even from so dire a malady as smallpox, and when there is added to it half to a dozen fruitless attempts at vaccination, they either neglect it after a few trials, or flatly refuse to submit to further efforts. And again, the act of vaccination is so trifling, per se, that the busy

practitioner shuns it whenever he can, and when there is coupled with it the probability of several failures in the same subject, he almost positively ignores it; and, furthermore, the production of cattle lymph has become so much of a trade, and subjected, in many instances, to such adulterations, as to vastly lessen the confidence of the profession, and even the laity, in its efficacy.

May not, then, these agencies have contributed largely to the manifest increase of smallpox during the last decade of years? For most assuredly its persistency and virulency is increasing with each succeeding winter.

When the good old doctor, prior to 1870, carefully selected his crusts from his healthiest subjects, and was called upon to perform the act of primary vaccination, *the probability of failure seldom entered his mind;* but now the converse is the rule, and while engaged in the operation, he always announces that "this may not take; if so, call again, and we will try it over."

As the present custom was largely introduced for the purpose of disarming those ignorant croakers against vaccination, who here and there infest society, and that its failure to do so is proven by the subsequent enactment of statutory laws making it compulsory, would it not be well to return again to the method in vogue some fifteen or twenty years ago? The immunity from human blood poisoning supposed to be enjoyed when bovine virus is used, is more than offset by sequelæ as fatal, if not so terrifying. Granting the possibility of communicating syphilitic virus by vaccination, who among our oldest physicians will affirm that they have ever personally witnessed such a result. Outbreaks of scrofula and of the eczemas, with an occasional convulsion, and sometimes erysipelas and sloughing about the point of inoculation, have, for all time, been the occasional attendants on vaccination: but have not all operators observed the increased malignancy of these attendants since the exclusive adoption of the present mode? While confessing that recent hobbies in vaccination so fully possess society at present as to make it hazardous for a physician to use other than bovine lymph, yet there seems to be an unmistakable tendency among them not to entirely exclude the present mode, but to secure the rehabiliment of the old. "'Tis a consummation devoutly to be wished."

J. H. Grimes, M.D.

Baltimore, Dec. 4th, 1882.

A Rare Case in Practice.

Ed. Med. and Surg. Reporter:—

Not long since I was called in consultation to see a woman said to be sixty-four years of age. On arrival, I was informed she had not had a movement from her bowels for some ten days, and had been vomiting stercoraceous matter, more or less, for three days and nights. Upon examining the abdominal region I found an unusually solid tumor occupying the abdominal cavity, and upon inquiry, was informed that the tumor had been gradually developing for fifteen years. That it had not been painful or given her any particular inconvenience. We believed the tumor had to do with the obstruction of the bowels. Used injections through a long gum-elastic tube, but without any good effect.

She died within a few hours after my visit, and I requested the Doctor, after her death, to get the consent of those interested to permit us to make a post-mortem examination, in order to ascertain the cause of death.

On opening the abdomen the tumor was found to be bony or ossified, and was without any attachments save by a pedicle some four inches in length, attached to the fundus of the uterus. It was a fibroid tumor, having its origin in the walls of the uterus, and as it enlarged it became enucleated. There were about a dozen smaller tumors of the same kind, in size from that of a hen's egg to small marbles; three of which were also enucleated and ossified, and the others in the walls of the womb. The uterine canal was found to be, by measurement, three and a half inches in depth. Sterility had been her condition through life. The large tumor weighed ten pounds. Upon examining the bowels, we found in the colon, about three inches from the ilio-cæcal valve, a perforation about the size of a pea, and the bowel in a high grade of inflammation around it. Some of the contents of the bowels had escaped into the abdominal cavity. The post-mortem examination demonstrated the correctness of our diagnosis of the case, that the tumor had to do with the obstruction of the bowels.

Evidently the tumor had suddenly changed its position in the abdomen by the woman turning over, probably, in bed, and caught the colon between the ossific growth and the spinal column, and so held it until death ensued.

The deposit in the fibroid, by which it had become bone-like, on chemical analysis, was found to be phosphate of lime, with a trace of carbonate of lime.

Is it probable that any other person ever lost their life from such a combination of causes as occurred in this particular case?

Bloomington, Ill. E. K. Crothers, M.D.

Belladonna vs. Opium.

Ed. Med. and Surg. Reporter:—

On the evening of Nov. 5th, 1882, I was called to see Rosa C., an infant, aged 3 months, of Irish parentage, who had taken, by mistake of the mother, a teaspoonful of a cough mixture containing grs. ij morphiæ and ʒ ij tinct. opii camph. to the ounce. It was just six hours before I saw it. The child lay in convulsions, face deep purple, no pulse at wrist, and apparently moribund. I gave no hope of recovery, but by way of experiment, told the mother I would try belladonna. I gave, per anum, 25 drops of Squibb's fluid extract, in a teaspoonful of warm water, expecting but little result; calling in the morning, I was told that at 3 A.M., 9 hours after giving the injection, the child came suddenly out of a deep stupor, and cried lustily for nurse, and the child made a good recovery in three days; *absolutely* nothing was given but the belladonna, except three teaspoonfuls of strong coffee before I saw the case; a clear argument for the antidotal powers of this remedy, in even desperate cases of opium poisoning. H. L. W. Burrill, M.D.

Bridgeport, Nov. 28th, 1882.

News and Miscellany.

The Recent Epidemic of Measles in Iceland.

Previous to 1882 there had been no general epidemic of measles in Iceland since 1846, a period of thirty-six years, which Mr. Charles E. Paterson, who writes about it in the *Edinburgh Medical Journal* for December, considers due to the fact of its isolated position. As evidencing the extreme contagiousness of measles, the following facts are noted. The disease was introduced into Iceland on the second of May last, by an Icelander, who arrived in Reykjavik from Copenhagen. When he landed he was still in the prodromic stage, and was able to go about. On the night of the third the eruption appeared. He and his family were imperfectly isolated. On May 9th and 10th his wife, four children and maid servant were all taken sick. On the 13th a student, who was in his house on the 2d, became affected. The two men servants of the apothecary, who were in his house on the 3d, and were exposed to no other source of infection, were taken ill on the 14th. A litttle girl, playing with his children on the 2d and 3d, carried the infection to a young woman, who became ill on the 18th. About the 22d the school children commenced to sicken, after which the disease spread rapidly, so that by the end of June 1100 out of a population of 2700 were ill, and six to eight deaths occurred daily. In the beginning of July the epidemic was almost over in Reykjavik, but was extending rapidly everywhere throughout the country. Out of a population of 2700 150 died. A prominent physician states that in his section of the country, out of a population of 6000 or 7000, he only knew of two or three individuals who did not take measles. In pregnant women the disease was very serious, and abortion frequently followed. The greatest neglect of all sanitary precautions obtained throughout the epidemic.

If any sanitary skeptic doubts the evil effects of neglect of strict isolation for the prevention of the spread of infectious diseases, he ought to be disabused of his error by this striking instance.

Wilmington (N. C.) Hospitals.

It is pleasant to read, in the North Carolina *Medical Journal*, of the improvements that are gradually taking place in the South, and none can be more heartily applauded than the establishment of well conducted hospitals. Indeed, good hospitals are as ornamental to a city as its handsome churches, libraries and theatres. A more deplorable and disgusting state of affairs cannot be imagined than the smallpox hospital which was forced upon the city of Wilmington, N. C., by the Freedman's Bureau, immediately after the war. To think that nearly a thousand miserable creatures were treated in this foul den, with no windows, huddled together without discrimination as to sex, fed with bread and soup that was actually alive with maggots, is too horrible to contemplate. It would scarcely have seemed inhuman had the torch been applied to this writhing mass of filth and emporium of disease. It was just such places as this that made the South a hotbed of disease after the war, when all was confusion, law and order forgotten, and dissolution held undisputed sway.

The new hospital is a credit to the city and county, and much forethought was shown in selecting a large tract of land for its erection, so that there will be no lack of space for additions and room for convalescing patients to enjoy the fresh air.

Charleston, too, is to have a new hospital, and thus let the good work go on.

A Noteworthy Example.

Mr. A. J. Drexel, the wealthy banker of this city, has sent his check for $5000, to endow a bed in the wing for incurables in the Hospital of the University of Pennsylvania.

This wing has been built through the liberality of Mr. Henry C. Gibson, another of our wealthy citizens. There are now fifteen beds so endowed. This is a noble charity, well worthy of imitation. But recently a wealthy man, who died, left nearly a million dollars to the government, to reduce the public debt; his money would have done much more good if given or left in the way indicated by Mr. Drexel; for the government has more than it requires, while our benevolent institutions are sadly lacking in material wealth.

One of the most praiseworthy efforts of the new Provost of the University, Dr. Pepper, is the unremitting energy he displays in securing the interest of our representative citizens in the University. If his life is spared, about which there is no reason for anxiety, the University will in time, and at no very distant date, assume such a position as to plainly indicate the wisdom of the trustees in their choice.

Exporting a Glacier.

The enormous mountain of ice, the Fonor-Svartisen, in Norway, is about to become, as we read in the *Revue Scientifique*, the object of a rather curious speculation.

It appears that a company of merchants of Berghen have obtained the right to sell it, in blocks, for exportation. A number of blocks have been taken and found of excellent quality, so that a number of vessels are being prepared for exporting it. As the glacier is about 120 miles square, and but two miles distant from the sea, it is probable the enterprise will prove very successful.

Resurrectionists.

Since our last issue, the principals in the crime of *body snatching*, of which we spoke, have been tried and convicted.

Dr. Forbes, the Demonstrator of Anatomy in the Jefferson College, has been arrested, and is under bail for trial at an early day. Public feeling, especially among the colored people, is very strong, as it naturally would be.

The sentence has not yet been passed upon those convicted, but it will be a very light one, as

the law provides only for a fine of $100 or one year's imprisonment, in the discretion of the Court.

Philadelphia County Medical Society Lectures.

Owing to the great crowds which filled the hall of the College of Physicians to overflowing, to hear the lectures of Professor Austin Flint, the concluding lecture (January 13) will be delivered in the amphitheatre of the Jefferson Hospital.

Change of Residence.

The office of the Missouri Vaccine Farm has been removed from Manchester, Mo., to Webster Groves, St. Louis Co., Mo.

Items.

—Smallpox is reported to be ravaging the East African districts north of Delagoa Bay.

—Dr. C. G. Jennings reports two successful cases of tracheotomy in the Detroit *Lancet*, Dec. 13th, 1882.

—The first work exclusively devoted to midwifery was published in 1513, in Latin, by Eucharius Rhodion.

—Dr. Thomas Dwight, formerly Professor of Anatomy at Bowdoin College, will fill the chair in Harvard lately vacated by Dr. Holmes.

—The establishment of the Chair of Midwifery in the University of Edinburgh antedated a similar departure in the University of Paris by a whole century.

—An hexameter from the "Iliad," to allay the gout, and a verse of "Lamentations," to cure the rheumatism, were among the therapeutic resources of the Ancients.

—Dr. J. D. Brumley has been appointed Commandant and Surgeon of the Soldiers' Home, at Newark, in place of the late Dr. A. N. Dougherty.

—Seven of the present eighteen Professors and Lecturers on Midwifery, in England, were at one time students of Professor Sir James Y. Simpson, in the University of Edinburgh.

—The annual report of the Jefferson Medical College Hospital, of this city, for the year ending December 1, states that there were 1303 patients treated in the wards, and 6601 patients in the out-patient department, making a total of 7904 cases of all kinds.

—During the past thirty years the number of insane persons in the Department of the Seine, in France, has multiplied more than sixfold, while the population has increased barely threefold. The estimated expenditure for the Paris asylums for next year is $960,000.

—On the 9th of February, 1726, the Town Council of Edinburgh, who were then the patrons of the University, consented to have the Theory and Practice of Physics and Chemistry taught in the University, and on the same day this institution was authorized to confer degrees in medicine.

—The terrible hurricane which has played such havoc with the buildings at Manilla would seem to have verified the truth of the adage "that is an ill wind that blows no one any good." It is stated that on the first day after the storm not a single case of cholera occurred in the town or the island.

OBITUARY NOTICES.

WM. C. REITER, M.D.,

for many years one of the leading physicians of this city, died on Tuesday morning, Nov. 28th. He was born in this city, graduated at the Jefferson Medical School in Philadelphia, and practiced in Mt. Pleasant until he returned to this city, in 1854. He was a constant student of literature and science, as well as a physician of deservedly high and widely spread reputation.

DR. J. T. UPDEGRAFF,

member of Congress from the Steubenville, Ohio, district, died at his home in Mt. Pleasant, Wednesday evening, Nov. 29th, aged 60 years. He was born in Jefferson County. He studied at Franklin College, graduated at the Medical School of the University of Pennsylvania, attended the medical schools of Edinburgh and Paris, pursued his profession in the county where he was born, was a successful agriculturist, served as a surgeon in the late war, and for ten years has taken an active part in Ohio politics.

DR. J. FORSYTH MEIGS.

On Saturday afternoon, December 16th, at four o'clock, this distinguished physician died.

Dr. Meigs was a son of Professor C. D. Meigs, who, while a member of the faculty of the Jefferson Medical College, sent his son to the University of Pennsylvania, for his education in medicine, by which act he very naturally incurred the displeasure of his Faculty.

Dr. Meigs was born in this city in 1818, and graduated in medicine in 1838.

He soon became a member of the staff of the Pennsylvania Hospital, and, devoting himself in an especial manner to the diseases of children, he rapidly gained a very extensive practice, and an exalted position among the very best people of the city. He was the author of the medical work, "A Practical Treatise on the Diseases of Children." The deceased was a member of the American Philosophical Society, Academy of Natural Sciences, Pathological Society and Obstetrical Society, a consulting physician at the Children's Hospital and a Fellow of the College of Physicians.

MARRIAGES.

DUFFIELD—WALL.—In the Phillips Presbyterian Church, New York, Nov. 21st, by Rev. Thomas G. Wall, assisted by Dr. Duffield, of Princeton, N. J., and Rev. Edward Wall, of Hoboken, N. J., John F. Duffield, M.D., and Margaret Cecil Wall, daughter of Rev. Thomas G. Wall.

MACPHERSON—SWAYNE—At Frankford, this city, November 26, 1882, by the Rev. J. M. Washburn, Dr. J. W. MacPherson, of Philadelphia, and Miss Ada B. Swayne, of Kennett Square, Pa.

ROBERTS—THOMSON.—On Wednesday, Nov. 22d, by the Rev. S. D. McConnell, Dr. A. Sidney Roberts and Carolina Hazlehurst, eldest daughter of Dr. William Thomson, of this city.

THE

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Original Department.

Communications.

LACERATION OF THE CERVIX UTERI AS A CAUSE OF POST-PARTUM HEMORRHAGE, AND OF SECONDARY HEMORRHAGE DURING THE MONTH.

BY S. W. DICKINSON, M.D.,
Marion, Virginia.

Since the appearance of Dr. Emmett's papers in 1869 and 1874, respectively, great and important advances have been made in treating that class of diseases due to laceration of the cervix uteri. This laceration occurs during labor, and while frequently it cannot be said that laceration has taken place in any given case at the time, it is, occasionally, the cause of a condition which requires immediate and prompt attention, and yet one to which our text-books give but little, if any, space. The three following cases, which happened in my practice during the past seven years, will best illustrate my meaning.

Mrs. S., age 27, was delivered of her first child in the fall of 1875. Labor was normal in all respects. My attention was called to the child, and when I returned to the mother I found her bleeding profusely. The usual treatment in *post partum* hemorrhage was resorted to, with partial success, but ever and anon, as the patient came from under the fullest influence of ergot, the hemorrhage increased, although the womb was as hard as a cocoanut, and about the size I was accustomed to find it when fully contracted. By the daily administration of ergot, etc., the hemorrhage was restrained, but not stopped, as she passed daily more or less blood, until on the 28th day after confinement, when I was called to see her, and found her bleeding profusely. I had not made a digital examination since about the eighth day after confinement, when, owing to the relaxed condition of the parts, I could detect nothing wrong. Now, on passing my finger into the os uteri, it passed through, as though there was a rent on one side, almost up to the internal os, and it at once occurred to me that this was the source of the hemorrhage. Withdrawing my hand and taking some exsiccated sulphate of iron on a paper, I covered the end of the index finger of my right hand with it, the blood causing it to stick, and then flexing the finger into the palm of my hand, introduced it to the os as best I could, without touching the vaginal walls. This stopped the hemorrhage at once. Then for a week or more I passed a ball of cotton, through a speculum, up to the lacerated edges, either wet with a saturated solution of sulphate of iron, or with exsiccated sulphate of iron sprinkled on it, as the indications seemed to require. After this I used cotton balls wet in alum water, with a string attached, and taught the patient to introduce and remove them herself. The usual tonics, etc., were, of course, used, also vaginal washes, either disinfectant or astringent, as indicated. Ergot seemed to lessen both hemorrhage and the discharges from cervix, and was freely used. After the hemorrhage was once permanently stopped, my patient recovered rapidly, and is now the mother of several children, nor has she had any uterine disease requiring treatment, the cicatrized surfaces producing no pathological consequences.

Case 2.—Saw Mrs. K. two weeks after con-

finement with twins at eight months. She was attended in labor by another doctor, and did not know it if there had been anything wrong. Had some hemorrhage most of the time since confinement, and had some treatment. On examination I could detect nothing wrong, as cervix was placid and vagina full of clots, ergot and cold applications failing to entirely stop hemorrhage. I saw her again in a few days, and detected a laceration, which I treated essentially as in the above case, and stopped the hemorrhage promptly and finally.

Case 3 is so similar to case just related as to render details unnecessary.

Emmett teaches us that "at least one-half of the ailments among those who have borne children are to be attributed to lacerations of the cervix." Goodell estimates that "one-sixth of the women suffering from uterine trouble have an ununited cervical laceration," and Sir James Y. Simpson thought "laceration of the cervix uteri so common, as to be a reliable sign of labor having occurred." Seeing, then, the frequency of laceration, we need not be surprised at hemorrhage occurring now and then from this source, and in a case of *post-partum* hemorrhage where the womb contracts, and no other organ is injured, and yet hemorrhage continues, I would proceed to treat the case as I did the cases recited above. And, moreover, such is my faith in the sufficiency of uterine contraction to control hemorrhage from the placental site, that I think it possible that many of the cases reported as requiring persulphate of iron, etc., to control post-partum hemorrhage, were cases of laceration of the cervix uteri. The reason hemorrhage is not more frequent from this source, may be accounted for by peculiarities in the distribution of blood vessels in the cervix, and to the lacerations being generally limited in extent. We generally have ulceration of the bowel in typhoid fever; but hemorrhage is the exception, and so it is here. For the causes of laceration, in detail, see Emmett, or Thomas, on "Diseases of Women." Probably precipitated labor, too early evacuation of liquor amnii, and the advice frequently heard in the lying-in-rooms, to "bear down" and pull against the nurse's hand before the head has escaped entirely from the dilating os, cause most cases, especially in first labors.

The diagnosis of laceration by the touch is not easily made until after the cervix has regained, to some extent, its natural proportions, and has to be made before that time by *exclusion*. We can be sure the womb is firmly contracted, that the perineum, vagina, rectum and all contiguous organs are intact, and knowing the frequency of laceration, we may say it is the cause in a given case. The treatment is such as indicated in case first related. After clearing vagina of clots I would use any good styptic directly to the parts, and pass a piece of cotton or a clean sponge with styptic on it, up to the os, and if hemorrhage is considerable, a tampon would be allowable, this being the only condition when it might be allowed in treating post-partum hemorrhage. The dangers are from thrombosis and pyæmia. The first of these may be avoided by not passing the styptic too far into the uterus or to the placental site, and by not putting too much of the styptic on the lacerated edges. Pyæmia may be avoided by removing the styptic dressing before suppuration is induced, and washing out the vagina several times daily with permanganate of potash, or carbolic acid well diluted, and by propping up patient in bed two or three times daily as soon as she is strong enough to bear it, in such a position as will favor the flow of discharges from the womb. The operation of uniting the lacerated edges, as done by Emmett, cannot be performed for eight or ten weeks after confinement, because of the condition of the parts. Besides, the hemorrhage, when it occurs, must be stopped at once, and we have not the time to get together the skilled assistants needed to do the operation, nor would we find the necessary instruments outside of the larger cities.

Hospital Reports.

CITY HOSPITAL, PRAGUE.

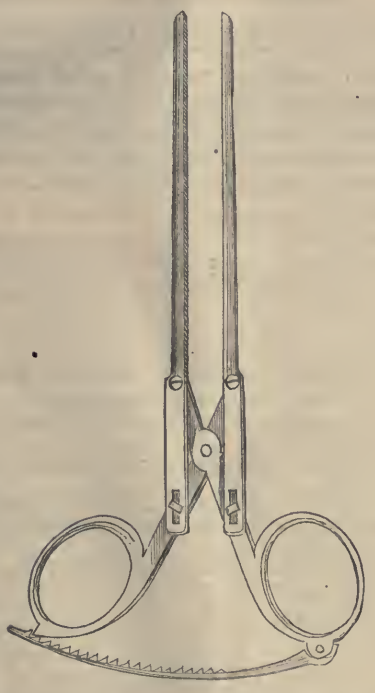
Resection of the Pyloric End of the Stomach.

BY C. GUSSENBAUER,
Professor of Surgery in University of Prague.
Reported by Louis Schwarz, M.D., for the Medical and Surgical Reporter.

Oct. 30th, 1882, M. K., aged 38, female, married, brewery helper, was transferred from the medical clinic of Prof. Pribram to the surgical clinic of Prof. Gussenbauer, with a diagnosis of carcinoma of the pyloric end of the stomach, having a history of three years. Patient was pale, anæmic, with great loss of muscular tissue, complained of vomiting after each meal, severe constipation, and all the symptoms of pyloric stenosis. Externally, to the right of the umbilicus, could be seen and felt a hard, nodular body, quite movable, which measured 14 cm., or $5\frac{2}{3}$ inches in length, and 7 cm. or 3 inches in breadth; also there could be felt a chain of lymph glands, which caused a constriction across the small curvature of the stomach; by dilating the stomach with fluid the tumor descended. Prof. G. said a carcinoma having a three years' history was not one to be selected for an operation, but having examined the patient tho-

roughly and finding the tumor movable, no adhesions, and few glands involved, he said, I am of the opinion that an operation is indicated and will perform the same according to the method described by Prof. Billroth, of Vienna. The temperature of the operating room was 24° R., or 86° F. The thymol spray was used, and all instruments were dipped in carbolized water. Bichloride of ethyl was the anæsthetic used. The abdomen was cleansed with soap, brush and carbolized water. An incision 17 cm., or 7 inches in length, was made in the direction of the median line and linea alba, through skin, superficial fascia, muscular tissue and peritoneum; the bleeding vessels were tied with catgut ligatures. An exploration was then made, to ascertain whether other organs were involved, which was found not to be the case, and the tumor very movable. The operation was then continued. The great omentum was drawn from below over the tumor, several ligatures were placed through different parts of the tumor, especially at the duodenal portion, to prevent hemorrhage and foreign substances escaping into the abdominal cavity. A Gussenbauer clamp was

FIG. 1.



Gussenbauer's Compression Clamp, for Resection of the Pylorus.

placed on the duodenum, to compress it and prevent hemorrhage and foreign substances escaping into the abdominal cavity. He then cut with scissors between the clamp which was on the duodenum and the ligatures which were on the duodenal portion of the tumor; this severed the tumor from the duodenum; the bleeding vessels were tied with catgut ligatures. The omentum was removed from the small curvature of the stomach, similar ligatures were placed through the remaining end of the tumor, that is, the part yet connected with the stomach, two clamps were placed on the non-cancerous portion of the stomach, one from above, the other from below, so that they met and compressed the stomach in a similar manner as before. With scissors he cut again between the clamps and the ligatures; this severed the tumor from the stomach; the bleeding vessels, numbering thirty, were tied as before. The clamps were then taken off, and the anterior and posterior walls of the stomach were brought together by thirty catgut sutures, according to a modified plan of Prof. Gussenbauer. The clamp was taken from the duodenum, and the duodenum was fastened to the remaining portion of the stomach by thirty six circular sutures of catgut. The wound and all adjoining parts were cleansed with sponges dipped in warm carbolized water, the abdominal walls were brought together by fourteen sutures of silk, and Lister's antiseptic dressing applied. The operation lasted three hours; two and a half ounces of the anæsthetic were used, and no foreign substance escaped into the abdominal cavity. An hour after the operation the temperature was 37.5° C. or 99.5° F., pulse 118, resp. 28. Wine and pancreatic beef soup were given per rectum. Evening, temp. 38° C. or 104° F., pulse 124, resp. 30, no vomiting, slight pain in the abdomen, ice in the mouth, morph. hydrochlor., one-fifth gr. Catheter used.

2d day, October 31st, morning temperature 37.5° C. or 99.5° F., pulse 118, respiration 28. Patient slept several hours during the night; slight vomiting; same treatment as before. Evening temperature 37.6° C. or 99.6° F., pulse 130, respiration 30. Catheter used.

3d day. November 1st, morning temperature 37° C. or 98.6° F., pulse 130, respiration 30. Patient doing well, nourishment by the mouth, beef tea in teaspoonful doses every fifteen minutes: rectal nourishment also continued; urine olive-green, containing carbolic acid. Evening temperature 37.6. C. or 99.6° F., pulse 130, respiration 30. Catheter used.

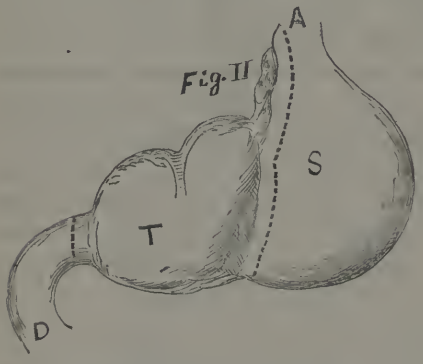
4th day, November 2d, morning temperature 37.4° C. or 99.3° F., pulse 114, respiration 28. Patient doing well, no pain, no vomiting, urine passed without aid of catheter. In the morning received by the mouth milk, at noon beef tea. Dressing was changed, wound doing well, union by the first intention, abdomen sunken, no pain. Evening temperature 37.7° C. or 100° F., pulse 106, respiration 28; rectal nourishment also continued.

5th day, November 3d, morning temperature 37° C. or 98.6° F., pulse 128, respiration 30. Severe pain during the night, patient becoming very weak, pulse small, frequent, compressible, dressing again changed, abdominal sutures removed, wound healing nicely, patient gradually sinking. Evening temperature 37.6° C. or 99.6° F., pulse 136, respiration 30; same treatment.

6th day, November 5th, morning temperature 37.4° C. or 99.3° F., pulse 140, respiration 40. Pulse rapidly sinking; patient failing rapidly: died at noon.

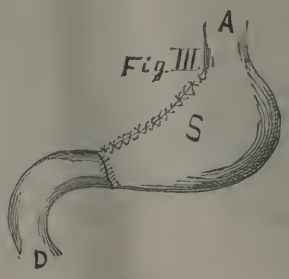
Post-mortem.—Brain and membranes pale and

anæmic; lungs and heart œdematous; heart valves quite normal; abdominal cavity contained about a quart of serum and pus; peritoneum injected with blood and pus; liver and kidneys parenchymatous inflammation; spleen and stomach small; greater curvature of the stomach measured 32 cm. or 13 inches; lesser curvature of the stomach measured 16 cm. or 6½ inches. On the surface of the stomach, where the circular and modified sutures came together, an ulcer was



Stomach Before the Operation.
A. Œsophagus. *S.* Stomach. *D.* Duodenum. *T.* Tumor resected.

found which measured 6 mm. or ¼ of an inch, which was caused by the opening of two sutures, one circular, the other modified; all other sutures were found normal; the opening between the duodenum and stomach was large enough to pass two fingers through; no carcinomatous matter was found, with the exception of a carcinomatous gland on the pancreas. Post-mortem diagnosis, purulent peritonitis. The tumor measured 11½ cm. or 4½ inches in length, 7 cm. or 3 inches in breadth. The duodenal opening of the tumor was very narrow, only allowing the little finger to be passed through. The tumor, which was examined under the microscope by Dr. Pietroikowski, assistant to Prof. G., was found to be a cylinder-celled serous carcinoma, which had grown through all the coats of the stomach.



After the Operation.

Prof. Gussenbauer's modified suture is made by passing the needle through all the tissue except the mucous membrane of the stomach. He claims the wound unites more rapidly and favorably, and does not allow any foreign matter to pass between the parts united by the sutures.

Editorial Department.

Periscope.

The Treatment of Rheumatism by Blisters.

We have had occasion lately to refer to this question on the affirmative side. We now note the following on the negative side, by Dr. A. B. R. Myers, from the *British Medical Journal*:—

About twenty-five years ago, I had the opportunity of studying the treatment of rheumatic fever by two physicians in the same wards. One of them prescribed opium freely, and the other gave no internal remedies; both had the affected joints carefully enveloped in cotton-wool, as they became attacked, and then firmly bound with flannel bandages, free perspiration being encouraged also by blankets, etc. The result seemed to me to be much the same: that the affected joints rapidly ceased to be painful, and that the patients made, as a rule, a good recovery.

Since that time, my treatment of rheumatic fever has kept very much within those lines (with, in some cases, the addition of salicin); and though I have seen many methods of treatment tried, and much extolled, I cannot say that they have appeared to me to have any special recommendations. But against one treatment I cannot resist, at the present moment, raising my humble protest, viz., the "garter blister," as again advocated by Dr. Davies in the *Journal* of October 28th. When so eminent a physician, with all the authority of long experience of a treatment originated by himself, can still advocate it, he must be very confident of its specially beneficial action, and no doubt must have many followers; but of all treatments (except packing) it is the one which I would not have tried upon myself. I had quite hoped that, long ere this, it had died a natural death. I have seen patients suffer such great discomfort from the raw surfaces of these circular blisters above the knee-joints when other joints have become affected, as to make them beg not to have any more applied. I ask, therefore, why should patients be given this additional suffering as a local treatment, when rapid freedom from pain can almost certainly be obtained by careful bandaging, as above stated; and if it be intended as a constitutional treatment, why choose such a specially painful form of blister as the "garter?"

It is some time since I have been able to watch closely this circular blister treatment; but it made a very decided impression upon me that it did not cut short the attack, and that it was very objectionable, from the patient's point of view.

THE

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D. G. BRINTON, M.D.,
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THE CLOSE OF THE YEAR.

With the present number we bring another year and another volume to a close. In glancing back at the mass of material, culled from such a number of sources, that has been presented to our readers, one cannot escape a feeling of surprise at its amount and diversity.

Never before in the history of science have so many able workers been engaged in pushing the car of knowledge. Never before was there a time when it lay as such an imperative duty of the physician to read and study the new developments of his science.

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Aware of this, it will be, as it has been, the especial aim of the REPORTER to select and condense, to glean the field and present the grain, and to avoid the introduction of long and theoretical discussions. By following strictly this policy we hope to keep our old friends and make new ones.

CEPHALALGIA OF ADOLESCENCE.

Surgeons have long recognized the relations existing between certain diseases of the bones and adolescence: the child is more subject at this age to tarsalgia, exostosis, epiphysary osteitis, etc. This period of life seems also to have a special influence on the course of acute diseases, and on the development of nervous disorders.

Among these last may be mentioned a form of cephalalgia which attacks young people between the ages of eleven and sixteen years; and which, on account of the intensity of suffering it occasions and its tenacity in certain cases, merits consideration as a distinct morbid entity.

A young boy of eleven or twelve years of age, in general intelligent and learning with facility, suddenly commences to suffer from headache,

which at first is slight and does not prevent the usual application to his studies.

But soon the headache recurs more frequently and the paroxyms last longer, so that it is found necessary to interrupt his studies from time to time. Finally the trouble becomes so persistent and acquires such intensity that any kind of intellectual occupation becomes impossible.

This cephalalgia is always frontal; it never affects the posterior or lateral parts of the head. It is especially characterized by actual pain, which distinguishes it from other neuropathic conditions, such as cerebral paresis of the adult, or vulgar neurasthenia, in which the painful sensations are more vague and localized of preference in the occipital and parietal regions.

In this form of headache suffering is rendered more intense by any attempt at brain work. The patient sleeps well and there is but little pain in the early part of the day if the child is kept perfectly quiet; later on the pain reappears and acquires its maximum of intensity toward evening. This affection is not neuralgic, for there is no pain on pressure along the course of any nerve. The absence of febrile reaction, the absolute integrity of the intellectual functions, and complete cure finally, which occurs in most cases, exclude the idea of any organic affection of the brain.

This affection is frequently of long duration. M. KELLER, in his memoir in the *Archives of Neurologie*, cites one case where a young man up to his 25th year was unable to finish his studies, and even at that age, though almost continually in the open air, he was not completely free of his sufferings. Almost every form of treatment has been tried, tonics, nervines, antispasmodics, etc.; the only treatment which has appeared to give rapid and permanent effects is the methodic employment of hydrotherapy.

NOTES AND COMMENTS.

Nymphomania and Hemorrhoids.

At the late meeting of the Medical Society of the State of Arkansas Dr. William H. Hardison related a case of nymphomania, which caused a respectable young married woman to masturbate and to so deport herself as to cause the greatest family unhappiness. All drugs were powerless to relieve her. It was finally discovered that she was afflicted with very sensitive hemorrhoids, fissure of the anus and constipation. Operation and attention to the bowels so thoroughly relieved her that she almost went to the other extreme.

Nerve Stretching in Sciatica.

The value of nerve stretching in sciatica is a question about which there is great diversity of opinion. In some cases it does do good, in others it is useless. In the *Maryland Medical Journal*, Dr. Randolph Winslow reports a case in which, four months after the operation, the improvement continued. If all other means have proved ineffectual then nerve stretching ought to be tried.

A New Cause of Mercurial Poisoning.

The *Medical Times and Gazette* notes several cases of mercurial poisoning (gums swollen, spongy and tender, with salivation) occurring among men who were employed in exhausting the little globes used in the incandescent system of electric lighting. The poisoning must have been due to mercurial vapor arising from the exhausting pumps, as no mercury was used, except that contained in these pumps.

SPECIAL REPORTS.

NO. XI.—OPHTHALMOLOGY.

BY CHAS. S. TURNBULL, M.D.

(*Concluded from page* 725.)

Retinitis Hæmorrhagica, especially in its Relation with Gout. Med. Times and Gazette, Dec. 10th, 1881, ii, 675. Considerations and conclusions based on twenty-four cases (including the case in Jaeger's Hand Atlas, pl. xiv, fig. 65). Of this number twelve had had gout, five others were probably gouty, and in seven no gouty history was obtained; nine were over 60 years old, none less than 45; thirteen males, eleven females. One eye affected in seventeen; both in seven. Gout probably predisposes to this affection, through the medium of disease of blood vessels, and "an incomplete thrombosis of the vena centralis" is probably the actual cause of the attack, suddenness of onset and asymmetry being in favor of this view. It differs from the relapsing intra-ocular bleeding of young adult males. H. refers to the possible connection of this latter disease, and also of hæmophilia, with gout, by the hereditary transmission of arterial disease.—*E. Nettleship.*

Macheck. *Retinitis Pigmentosa. Przeglad Lek.*, 1881. Of seven children of consanguineous parents, five are affected with ret. pigmentosa hemeralopia, and atrophy of the optic nerve. The other two children (daughters) are well, and their children have normal eyes. Symptoms of hemeralopia first manifested themselves after the tenth year; the only boy became totally blind when eighteen years old, while the sight of the four daughters was still moderately good in their twentieth year. The eyes were mostly myopic, 5 to 9.5 D.; all had nystagmus. The retinal deposits were accompanied in two cases by acute inflammation of the choroid, after strychnine had been tried for a time. Color blindness was observed in three cases; one complete, twice partial.

St. Marenitsch. *Unilateral diffuse syphilitic retinitis*, with complete loss of sight, cured in forty-eight days, by the use of iodine and mercury. *Prot. d. Med. Ges. in Wilna*, 1881, No. 3.—*Hirschmann.*

Mas. *An Interesting Case of Amaurosis Due to Hysteria, La Union de las Ciencias Médicas de Cartagena.* Two successive attacks of amaurosis in consequence of hysterical eclampsia, without any ophthalmoscopic changes, the one lasting five, the other thirty-one days, the amaurosis disappearing suddenly each time. These cases also are open to doubt.

Reid and Hunter. *Embolism of Central Artery of Left Retina.* Glasgow *Medical Journal*, Oct. 1881. An ordinary case of embolism with partial recovery, the important point being the history of numerous attacks of temporary total blindness of same eye, lasting from half an hour to two hours, and usually coming on after severe exertion; at least twelve such attacks occurred in the three months preceding the final "embolism."

Priestley Smith. *Retinitis Pigmentosa, Connected with a History of Maternal Shock. The Ophthalmic Review*, vol. i, Dec., 1881, p. 30. In the history recorded by S. there was no constitutional nerve disorder in the earlier generations, and no consanguineous marriage. The mother of the cases he relates had borne two healthy children. She suffered a severe nervous shock during the earlier months of the third pregnancy; the child, and all the subsequent children, excepting one which died in infancy, developed retinitis pigmentosa with partial deaf-mutism.—*Fitzgerald.*

Unterharnscheidt. *The Development of Detachment of the Retina in Myopia. Berl. Klin. Wochenschr.*, No. 40, 1881, p. 585. The author concludes: If the ciliary muscle is suddenly relaxed when powerfully contracted (especially when wrong glasses are used or objects are brought excessively near), a reduction of the tension of the vitreous body ensues, which for the moment is considerable, and which cannot always be compensated for by a corresponding contraction of the eyeball, because the increased tension, the bulging and its consequences have diminished the elasticity. As the elasticity of the scleral tissue, which acts as a regulator, fails here, the law of the "horror vacui," so to speak, comes into play, which suffices, when there is the predisposition, to detach the stretched retina from the choroid, whose connection with the retina has been loosened. If the accommodative strain continues, the slight elevation may develop into a bullous detachment of the retina. As the increased intraocular tension which accompanies the accommodative action also causes absorption of the vitreous humor, it becomes mainly the part of the stream of diffusion which sets in when the accommodation is suddenly relaxed to fill the vacuum created. The compensating fluid from the blood vessels of the choroid would then increase the detachment, as the retina is no longer any obstacle. The author then discusses the therapeutics and prophylactic measures.

C. Higgens. *Three Cases of Simple Atrophy of Discs in the same Family. Lancet*, Nov. 19, 1881, vol. 2, 869. The fourth, fifth and eighth children of a family of ten, born alive. S. began to fail at æt 15 years in the fourth, 11 in fifth, and 10 in eighth. No other symptoms than simple atrophy of discs with almost blindness; failure rapid in fourth and eighth, slow in the fifth. Mother, symptoms of syphilis soon *after* birth of No. 4; Nos. 6, 9 and 10 healthy; No. 7 died almost at birth; between Nos. 4 and 5 were several miscarriages. Retinal blood-supply below normal. H. thinks the atrophy due to disease of blood vessels.—*E. Nettleship.*

Talko. *Injuries of the Eye in Recruits. Gaz. lekarsh*, 1881, *C. f. a.*, Bd. v. p. 386. Injuries of the cornea by caustic potash, nitrate of silver, or bites of leeches, are frequently found among the Russian conscripts. An artificial trauma of the eye was proven in sixteen cases out of two hundred and thirty-five who were suspected of simulating, or 7 per cent.

Drosdoff. *Epidemic Scurvy. Journal of the Kasan Med. Soc.*, 1881, Nos. 14 and 15. From a report by Krückow. Among 200 scurvy patients, 28 with diseases of the eye. Besides hemorrhages beneath the conjunctiva and skin of the lids, four cases of keratitis serosa diffusa

(one with a corneal ulcer), two cases of iritis, four of hemoralopia.—*Hirchmann.*

v. Hippel. *Affections of the Eye in Recurrent Fever. Ber. über d. Ophth. Klinik Zu Giessen, Stuttgart*, Enke, 1881. Among 193 patients, 23 cases = 11 per cent. were observed with affections of the eye. Most of them iridochoroiditis. Hypopyon was never observed. In four cases the ocular affection set in during the attacks in the others, one to four weeks later. In two cases hemorrhages of the retina were observed. Result favorable in all cases.

Luchhau. *Diseases of the Eye and Ear in Recurrent Fever. Ver. für Wissench.* Heilk. z. Königb. *Berl. Klin. Wochenschr.*, No. 43. Among 180 patients, six cases with diseases of the eye during the attack, in three iritis in one eye (once with hypopyon), in two optic neuritis of both eyes, and in one iritis in one eye with hypopyon during the first attack, from which recovery was complete, and during the second attack irido-cyclitis and neuro retinitis in both eyes.

Hirchberg. *Tuberculous Inflammation of the Eye. Transact.* of the Internat. Med. Congr., London, 1881, p. 117. Among 1700 patients, three cases; one of the conjunctiva bulbi, one of the iris, and one of the choroid. The diagnosis was confirmed in each case by the anatomical investigation. In three cases, swelling of the lymphatic glands was observed as a secondary symptom, so that it is advisable to remove tuberculous deposits as rapidly as possible by operation. The changes in the eye are undoubtedly of a specific character.

J. A. Ormerod. *The Diagnostic Symptoms of Tabes Dorsalis. St. Bartholomew's Hospital Reports*, Vol. xvii, 39, 1881. O. directs his attention in the interesting paper, chiefly to the absence of the knee phenomena and affections of the pupils in the early stages of tabes. He observes, in the first place, that (as is known) the true "Argyll Robertson pupil" (a small pupil was associated, but with no reflex action) is subject to variations; it may be larger, but act as above; or it may be motionless to associated as well as to reflex stimulus. In eight cases, with marked incoördination, reflex action of pupils lost or feeble; associated action normal in six; both actions wanting or feeble in two. In four, with slight incördination, reflex action lost, associated action normal, two; both feeble, one; variable, one. In four with other symptoms but no incoordination, reflex action lost or feeble, associated action normal in three; both absent, one. In twenty-one cases, optic atrophy in four; six patients were more or less deaf, two of them having optic nerve atrophy (E. Nettleship).

J. Hughlings Jackson. *Tumors of the Cerebellum.* Proceedings of the Medical Soc. of London, vol. v, 50, 1881. The point of special ophthalmic interest is the author's statement, that he has never seen defective V. in cerebellar tumor without optic neuritis; thus, in reference to the hypothesis that such tumor, especially if of the middle lobe, might cause blindness by pressing on corp. quadrigen.

Zaufal. *Value of Ophthalmoscopic Examination for the Diagnosis, Prognosis and Therapeutics of the Ear. Pragera Med. Wochenschr.* Bd. vi, No. 45, p. 448. When an inflammation of the middle ear spreads to the meninges, the eye of the same side is first attacked; generally, however, both eyes are affected. After trephining the mastoid process, the hyperæmia of the corresponding eye vanishes more rapidly. Almost all cases of otitis media, with or without caries, which lead to meningitis and thrombosis of the sinus are complicated with affections of the fundus of the eye.

Correspondence.

A Correction.

Ed. Med. and Surg. Reporter:—

I observe in your issue of the 23d inst. the following strange combination of erroneous statements: "Dr. J. Forsyth Meigs * * * * was a son of Prof. C. D. Meigs, who, while a member of the Faculty of the Jefferson Medical College, sent his son to the University of Pennsylvania, for his education in medicine, by which act he very naturally incurred the displeasure of his Faculty." I desire to inform you that Dr. C. D. Meigs was elected a professor in the Jefferson Medical College on the 6th *day of April*, 1841, that is, *three years after Dr. J. F. Meigs had graduated* at the University. How such a singular blunder could have been made I fail to see.

Respectfully yours,

Ellerslie Wallace, M.D.

Philadelphia, Dec. 26th, 1882.

[The statement was taken, evidently too hastily, from the daily papers. We are glad to have it corrected from the records, as it might seem to have been prompted by some questionable motive. Dr. C. D. Meigs was too sincere an admirer of the great institution with which he was so long and honorably connected to take any action which would in any way reflect on it.—Eds. Reporter.]

DEATH.

SHELLAR.—In Mt. Joy, Nov. 29th, after a lingering illness, Dr. Adam Shellar, in his seventy-fifth year.

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Medical and surgical reporter
(Philadelphia)

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